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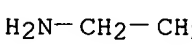
=> d que l30
L23       141484 SEA FILE=REGISTRY ABB=ON  PLU=ON  "SILANE"
L24        25828 SEA FILE=REGISTRY ABB=ON  PLU=ON  "AMINOPROPYL"
L25          569 SEA FILE=REGISTRY ABB=ON  PLU=ON  L23 AND L24
L26          220 SEA FILE=REGISTRY ABB=ON  PLU=ON  L25 AND "GAMMA"
L27           57 SEA FILE=REGISTRY ABB=ON  PLU=ON  L26 AND NC=1 NOT PMS/CI
L28           43 SEA FILE=REGISTRY ABB=ON  PLU=ON  L27 NOT RSD/FA
L29            3 SEA FILE=REGISTRY ABB=ON  PLU=ON  L28 NOT O/ELS
L30            1 SEA FILE=REGISTRY ABB=ON  PLU=ON  L29 AND C3 H11 N SI/MF
```

=> d

L30 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2002 ACS
RN 6382-82-7 REGISTRY
CN 1-Propanamine, 3-silyl- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN **.gamma.-Aminopropylsilane**
CN **3-Aminopropylsilane**
FS 3D CONCORD
MF **C3 H11 N Si**
LC STN Files: BIOSIS, CA, CAPLUS, MEDLINE, TOXCENTER, USPAT2, USPATFULL



73 REFERENCES IN FILE CA (1967 TO DATE)
22 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
73 REFERENCES IN FILE CAPLUS (1967 TO DATE)

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=> d que l32
L23      141484 SEA FILE=REGISTRY ABB=ON  PLU=ON  "SILANE"
L24       25828 SEA FILE=REGISTRY ABB=ON  PLU=ON  "AMINOPROPYL"
L25         569 SEA FILE=REGISTRY ABB=ON  PLU=ON  L23 AND L24
L26         220 SEA FILE=REGISTRY ABB=ON  PLU=ON  L25 AND "GAMMA"
L27          57 SEA FILE=REGISTRY ABB=ON  PLU=ON  L26 AND NC=1 NOT PMS/CI
L28          43 SEA FILE=REGISTRY ABB=ON  PLU=ON  L27 NOT RSD/FA
L29           3 SEA FILE=REGISTRY ABB=ON  PLU=ON  L28 NOT O/ELS
L30           1 SEA FILE=REGISTRY ABB=ON  PLU=ON  L29 AND C3 H11 N SI/MF
L32           3 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L30/PREP
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3 cites

for preperation of γ-aminopropylsilale

=> d ibib abs hitstr 1

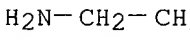
L32 ANSWER 1 OF 3 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2000:166066 HCAPLUS
DOCUMENT NUMBER: 132:205115
TITLE: Chiral stationary phase and chromatographic columns
INVENTOR(S): Kato, Hiroshi; Fukushima, Takeshi; Imai, Kazuhiro; Nakajima, Kenichiro; Nishioka, Ryota
PATENT ASSIGNEE(S): Sumika Bunseki Center K. K., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000074896	A2	20000314	JP 1998-284722	19980831

AB Chiral stationary phase having 3-[.omega.-[N-(3,5-dinitrophenylaminocarbonyl)-L-valyl]aminoalkylcarbonylamino]propylsilyl or 3-[.omega.-[N-[(R)-1-(.alpha.-naphthyl)ethylaminocarbonyld]-L-tert-leucyl]aminoalkylcarbonylamino]propylsilyl group is claimed. Chromatog. columns filled with silica gels having the above stated group are also claimed. The column is useful for optical resoln. and anal. of racemic mixts., e.g. amino acids.

IT **6382-82-7DP**, 3-Aminopropylsilane, reaction products with silica gel, aminoundecanoic acid, and naphthylethylaminocarbonylleucine
RL: ARU (Analytical role, unclassified); BSU (Biological study, unclassified); PNU (Preparation, unclassified); ANST (Analytical study); BIOL (Biological study); **PREP (Preparation)**
(chiral stationary phase and silica gel chromatog. columns for optical resoln. of amino acids)

RN 6382-82-7 HCAPLUS
CN 1-Propanamine, 3-silyl- (9CI) (CA INDEX NAME)



=> d ind

L32 ANSWER 1 OF 3 HCAPLUS COPYRIGHT 2002 ACS
IC ICM G01N030-48
ICS G01N030-48; B01J008-02; C07B057-00
CC 9-3 (Biochemical Methods)
Section cross-reference(s): 34
ST chiral stationary phase resoln chromatog column; amino acid resoln chromatog column; silica gel modified chiral stationary phase
IT Silica gel, analysis
RL: ARU (Analytical role, unclassified); BSU (Biological study, unclassified); PNU (Preparation, unclassified); ANST (Analytical study); BIOL (Biological study); PREP (Preparation)
(amino acid moiety-contg.; chiral stationary phase and silica gel chromatog. columns for optical resoln. of amino acids)
IT Amino acids, processes
RL: PEP (Physical, engineering or chemical process); PROC (Process)
(chiral stationary phase and silica gel chromatog. columns for optical resoln. of amino acids)
IT Liquid chromatographic stationary phases
(chiral; chiral stationary phase and silica gel chromatog. columns for optical resoln. of amino acids)
IT Resolution (separation)
(chromatog.; chiral stationary phase and silica gel chromatog. columns for optical resoln. of amino acids)
IT 3422-91-1DP, reaction products with aminopropylsilylated silica gel and naphthylethylaminocarbonylleucine **6382-82-7DP,** 3-Aminopropylsilane, reaction products with silica gel, aminoundecanoic acid, and naphthylethylaminocarbonylleucine 193611-29-9DP, N-[(R)-1-(.alpha.-Naphthyl)ethylaminocarboyl]-L-tert-leucine, reaction products with aminoundecanoic acid and aminopropylsilylated silica gel
RL: ARU (Analytical role, unclassified); BSU (Biological study, unclassified); PNU (Preparation, unclassified); ANST (Analytical study); BIOL (Biological study); **PREP (Preparation)**
(chiral stationary phase and silica gel chromatog. columns for optical resoln. of amino acids)
IT 59-51-8, Methionine 70-54-2, Lysine 80-68-2, Threonine 150-30-1, Phenylalanine 302-72-7, Alanine 302-84-1, Serine 328-39-2, Leucine 443-79-8, Isoleucine 516-06-3, Valine 556-03-6, Tyrosine 609-36-9, Proline 617-45-8, Aspartic acid 617-65-2, Glutamic acid 3130-87-8, Asparagine 6899-04-3, DL-Glutamine
RL: PEP (Physical, engineering or chemical process); PROC (Process)
(chiral stationary phase and silica gel chromatog. columns for optical resoln. of amino acids)
IT 56-41-7P, L-Alanine, preparation 56-45-1P, L-Serine, preparation 56-84-8P, L-Aspartic acid, preparation 56-85-9P, L-Glutamine, preparation 56-86-0P, L-Glutamic acid, preparation 56-87-1P, L-Lysine, preparation 60-18-4P, L-Tyrosine, preparation 61-90-5P, L-Leucine, preparation 63-68-3P, L-Methionine, preparation 63-91-2P, L-Phenylalanine, preparation 70-47-3P, L-Asparagine, preparation 72-18-4P, L-Valine, preparation 72-19-5P, L-Threonine, preparation 73-32-5P, L-Isoleucine, preparation 147-85-3P, L-Proline, preparation 312-84-5P, D-Serine 319-78-8P, D-Isoleucine 328-38-1P, D-Leucine 338-69-2P, D-Alanine 344-25-2P, D-Proline 348-67-4P, D-Methionine 556-02-5P, D-Tyrosine 632-20-2P, D-Threonine 640-68-6P, D-Valine 673-06-3P, D-Phenylalanine 923-27-3P, D-Lysine 1783-96-6P, D-Aspartic acid 2058-58-4P, D-Asparagine 5959-95-5P, D-Glutamine 6893-26-1P, D-Glutamic acid
RL: PUR (Purification or recovery); PREP (Preparation)

(chiral stationary phase and silica gel chromatog. columns for optical resoln. of amino acids)

=> d ibib abs hitstr 2

L32 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1995:348452 HCAPLUS
DOCUMENT NUMBER: 122:274949
TITLE: Use of fluorescamine for the spectrofluorimetric investigation of primary amines on silanized glass and indium tin oxide-coated glass
AUTHOR(S): Wilson, Robert; Schiffrin, David J.
CORPORATE SOURCE: Dep. Chemistry, Univ. Liverpool, Liverpool, L69 3BX, UK
SOURCE: Analyst (Cambridge, U. K.) (1995), 120(1), 175-8
CODEN: ANALAO; ISSN: 0003-2654
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Fluorescamine reacts with primary amines to yield a fluorescent product. Treatment of aminosilanized glass and aminosilanized In Sn oxide-coated glass allows the silanized surface to be studied in situ. Two methods of silanizing these materials are compared. The effect of aq. solns. on the silanized surface was monitored. The results are used to account for the amt. of horseradish peroxidase covalently attached to the surfaces. The N-hydroxysuccinimide ester of ferroceneacetic acid was prep. and covalently attached to aminosilanized In Sn oxide-coated glass, and its electrochem. properties were studied with the aid of fluorescamine.

IT **6382-82-7DP**, 3-Aminopropylsilane, reaction products with silica
RL: RCT (Reactant); SPN (Synthetic preparation); **PREP (Preparation)**
(surface; spectrofluorimetric study of primary amines on silanized glass and indium tin oxide-coated glass using fluorescamine indicator)
RN 6382-82-7 HCAPLUS
CN 1-Propanamine, 3-silyl- (9CI) (CA INDEX NAME)

$H_2N-CH_2-CH_2-CH_2-SiH_3$

=> d ind 2

L32 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2002 ACS
CC 66-4 (Surface Chemistry and Colloids)
Section cross-reference(s): 9, 73, 80
ST ferroceneacetic acid surface grafted electrochem property; hydroxysuccinimide ester ferroceneacetic acid grafted oxide; horseradish peroxidase surface grafted electrochem property; glass surface grafted spectrofluorimetry fluorescent probe; fluorescamine probe grafted indium tin oxide; amine surface grafted oxide fluorescent probe
IT Glass, oxide
RL: NUU (Other use, unclassified); USES (Uses)
(spectrofluorimetric study of primary amines on silanized glass and indium tin oxide-coated glass using fluorescamine indicator)
IT Amines, preparation
RL: ARU (Analytical role, unclassified); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation)
(reaction products, with oxides; surface; spectrofluorimetric study of primary amines on silanized glass and indium tin oxide-coated glass using fluorescamine indicator)
IT Amino group
(surface, spectrofluorimetric study of primary amines on silanized glass and indium tin oxide-coated glass using fluorescamine indicator)
IT 38183-12-9, Fluorescamine
RL: ARU (Analytical role, unclassified); NUU (Other use, unclassified); ANST (Analytical study); USES (Uses)
(fluorescent probe; spectrofluorimetric study of primary amines on silanized glass and indium tin oxide-coated glass using fluorescamine indicator)
IT 9003-99-0DP, Peroxidase, reaction products with N-succinimidyl 3-(2-pyridylthio)propionate
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(horseradish; surface; spectrofluorimetric study of primary amines on silanized glass and indium tin oxide-coated glass using fluorescamine indicator)
IT 38183-12-9DP, Fluorescamine, reaction products with aminopropylated oxides
RL: ARU (Analytical role, unclassified); PRP (Properties); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation)
(surface; spectrofluorimetric study of primary amines on silanized glass and indium tin oxide-coated glass using fluorescamine indicator)
IT 83306-17-6DP, N-Succinimidyl 3-(2-pyridylthio)propionate, reaction products with peroxidase horseradish 123951-06-4DP, Ferroceneacetic acid N-hydroxysuccinimide ester, reaction product with indium tin oxide
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(surface; spectrofluorimetric study of primary amines on silanized glass and indium tin oxide-coated glass using fluorescamine indicator)
IT 50926-11-9D, Indium tin oxide, reaction products with aminopropylsilane and fluorescamine
RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
(surface; spectrofluorimetric study of primary amines on silanized glass and indium tin oxide-coated glass using fluorescamine indicator)
IT **6382-82-7DP**, 3-Aminopropylsilane, reaction products with silica 7631-86-9DP, Silica, reaction products with aminopropylsilane
RL: RCT (Reactant); SPN (Synthetic preparation); **PREP (Preparation)**
(surface; spectrofluorimetric study of primary amines on silanized glass and indium tin oxide-coated glass using fluorescamine indicator)

=> d ibib abs hitstr 3

L32 ANSWER 3 OF 3 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1989:595537 HCAPLUS
DOCUMENT NUMBER: 111:195537
TITLE: Functional monomers and polymers. CLIV. Application of nucleic acid base containing polymers to high-performance liquid chromatography
AUTHOR(S): Nagae, Suguru; Suda, Yasuo; Inaki, Yoshiaki; Takemoto, Kiichi
CORPORATE SOURCE: Fac. Eng., Osaka Univ., Suita, 565, Japan
SOURCE: J. Polym. Sci., Part A: Polym. Chem. (1989), 27(8), 2593-609
CODEN: JPACEC; ISSN: 0887-624X
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Poly(L-lysine) derivs. contg. pendant nucleic acid bases, such as thymine or adenine, were bonded successfully to 3-aminopropylsilanized silica and silica gel. These resins were useful as the column of HPLC for the selective sepn. of oligoethylenimine derivs. having pendant thymine or adenine bases.

IT **6382-82-7DP**, 3-Aminopropylsilane, reaction products with hydrobromide adenine group-contg. poly(lysine)
RL: SPN (Synthetic preparation); **PREP (Preparation)**
(prepn. of)
RN 6382-82-7 HCAPLUS
CN 1-Propanamine, 3-silyl- (9CI) (CA INDEX NAME)

=> d ind 3

L32 ANSWER 3 OF 3 HCAPLUS COPYRIGHT 2002 ACS
CC 35-8 (Chemistry of Synthetic High Polymers)
Section cross-reference(s): 34, 36
ST nucleic acid contg polylysine HPLC; thymine contg polylysine HPLC column; adenine contg polylysine HPLC column; polyethylenimine oligomer sepn polylysine HPLC; silica gel polylysine HPLC column
IT Silica gel, compounds
RL: SPN (Synthetic preparation); PREP (Preparation)
(reaction products with adenine or thymine pendant group-contg. poly(lysines), prepn. and use of as HPLC columns for selective sepn. of oligoethylenimines)
IT Chromatographs, column and liquid
(columns, adenine or thymine pendant group-contg. poly(lysine) reaction products with silica gels as, for selective sepn. of oligoethylenimines)
IT 9002-98-6D, Poly(ethylenimine), adenine or thymine derivs.
RL: USES (Uses)
(oligomers, selective sepn. of, by HPLC, columns for, adenine or thymine pendant group-contg. poly(lysines) reaction products with silica gels as)
IT 25868-59-1P 25931-47-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and functionalization of)
IT 25868-59-1DP, brominated, reaction products with thymine or adenine derivs. and with aminopropylsilane-treated silica gel 25931-47-9DP, brominated, reaction products with thymine or adenine derivs. and with aminopropylsilane-treated silica gel
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and use of as HPLC columns for selective sepn. of oligoethylenimines)
IT 108-55-4DP, reaction products with poly(carbobenzyloxylysine)
6382-82-7DP, 3-Aminopropylsilane, reaction products with hydrobromide adenine group-contg. poly(lysine) 82859-44-7DP, reaction products with brominated poly(carbobenzyloxylysine) 123549-43-9DP, reaction products with brominated poly(carbobenzyloxylysine)
RL: SPN (Synthetic preparation); **PREP (Preparation)**
(prepn. of)
IT 2879-60-9
RL: USES (Uses)
(reaction of adenine and thymine pendant group-contg. poly(lysines) with aminopropylsilane-treated silica gels in presence of)
IT 107-10-8, n-Propylamine, reactions
RL: RCT (Reactant)
(reaction of, with carboxybenzyloxylysine carboxyanhydride)
IT 1676-86-4
RL: RCT (Reactant)
(reaction of, with propylamine)
IT 6382-82-7, 3-Aminopropylsilane
RL: USES (Uses)
(silica gel treated with, reaction of, with adenine and thymine pendant group-contg. poly(lysines), for use as HPLC columns)

```
=> d que l45
L16          509 SEA FILE=HCAPLUS ABB=ON  PLU=ON  (?PROTEIN? OR ?PEPTID?)(2A)CHI
                 P
L18        24061 SEA FILE=HCAPLUS ABB=ON  PLU=ON  (?PROTEIN? OR ?PEPTID?)(5A)(?I
                 MMOB? OR ATTACH? OR SPAN? OR FIX OR FIXED OR FIXING)
L23       141484 SEA FILE=REGISTRY ABB=ON  PLU=ON  "SILANE"
L24        25828 SEA FILE=REGISTRY ABB=ON  PLU=ON  "AMINOPROPYL"
L25          569 SEA FILE=REGISTRY ABB=ON  PLU=ON  L23 AND L24
L26          220 SEA FILE=REGISTRY ABB=ON  PLU=ON  L25 AND "GAMMA"
L27           57 SEA FILE=REGISTRY ABB=ON  PLU=ON  L26 AND NC=1 NOT PMS/CI
L28           43 SEA FILE=REGISTRY ABB=ON  PLU=ON  L27 NOT RSD/FA
L29            3 SEA FILE=REGISTRY ABB=ON  PLU=ON  L28 NOT O/ELS
L30            1 SEA FILE=REGISTRY ABB=ON  PLU=ON  L29 AND C3 H11 N SI/MF
L36       156729 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L16 OR L18 OR  (?PROTEIN? OR
                 ?PEPTID?)(5A)(?ASSOCIAT? OR ?COUPL? OR MICROSPOT? OR ?ARRAY?)
L37       668665 SEA FILE=HCAPLUS ABB=ON  PLU=ON  ?MEMBRAN? OR ?BILAYER? OR
                 ?AMPHIPHILIC?(3A)?SURFAC? OR ?PROTEIN?(3A)SPAN?
L38       289077 SEA FILE=HCAPLUS ABB=ON  PLU=ON  ?PRINT? OR QUILL? OR QUILL-PIN
                  OR SPOT? OR MICROSPOT?
L39      1041533 SEA FILE=HCAPLUS ABB=ON  PLU=ON  GLASS OR SILICA OR QUARTZ
L40           73 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L30
L41        43272 SEA FILE=HCAPLUS ABB=ON  PLU=ON  G-PROTEIN
L42          349 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L36 AND L37 AND L38
L43            1 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L42 AND L40
L44            1 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L39 AND L43
L45            1 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L44 AND L41
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1 cite

looking for claim 1

=> d bib abs

L45 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2002 ACS
AN 2002:123543 HCAPLUS
DN 136:163683
TI Arrays of biological **membranes** and methods and use thereof
IN Lahiri, Joydeep; Fang, Ye; Jonas, Steven J.; Kalal, Peter J.; Wang, Wei
PA USA
SO U.S. Pat. Appl. Publ., 18 pp.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2002019015	A1	20020214	US 2001-854786	20010514
PRAI	US 2000-224135P	P	20000810		

AB The present invention overcomes the problems and disadvantages assocd. with prior art arrays by providing an array comprising a plurality of biol. **membrane microspots** assocd. with a surface of a substrate that can be produced, used and stored, not in an aq. environment, but in an environment exposed to air under ambient or controlled humidities. Preferably, the biol. **membrane microspots** comprise a **membrane** bound **protein**. Most preferably, the **membrane** bound **protein** is a **G-protein coupled** receptor, an ion channel or a receptor tyrosine kinase.

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=> d que l48
L1            65 SEA FILE=HCAPLUS ABB=ON  PLU=ON  LAHIRI J?/AU
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L3           122 SEA FILE=HCAPLUS ABB=ON  PLU=ON  JONAS S?/AU
L4            19 SEA FILE=HCAPLUS ABB=ON  PLU=ON  KALAL P?/AU
L5         10759 SEA FILE=HCAPLUS ABB=ON  PLU=ON  WANG W?/AU
L6         13029 SEA FILE=HCAPLUS ABB=ON  PLU=ON  (L1 OR L2 OR L3 OR L4 OR L5)
L7           526 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L6 AND ?MEMBRANE?
L8            27 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L7 AND ASSAY?
L9             3 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L8 AND (CHIP OR ?ARRAY? OR
                  SURFACE OR ?SILAN? OR GLASS)
L10           24 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L8 NOT L9
L11            1 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L10 AND LIGAND(2A)BIND?
L12            4 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L9 OR L11
L16          509 SEA FILE=HCAPLUS ABB=ON  PLU=ON  (?PROTEIN? OR ?PEPTID?)(2A)CHI
                  P
L18        24061 SEA FILE=HCAPLUS ABB=ON  PLU=ON  (?PROTEIN? OR ?PEPTID?)(5A)(?
                  MMOB? OR ATTACH? OR SPAN? OR FIX OR FIXED OR FIXING)
L23       141484 SEA FILE=REGISTRY ABB=ON  PLU=ON  "SILANE"
L24        25828 SEA FILE=REGISTRY ABB=ON  PLU=ON  "AMINOPROPYL"
L25          569 SEA FILE=REGISTRY ABB=ON  PLU=ON  L23 AND L24
L26          220 SEA FILE=REGISTRY ABB=ON  PLU=ON  L25 AND "GAMMA"
L27           57 SEA FILE=REGISTRY ABB=ON  PLU=ON  L26 AND NC=1 NOT PMS/CI
L28           43 SEA FILE=REGISTRY ABB=ON  PLU=ON  L27 NOT RSD/FA
L29            3 SEA FILE=REGISTRY ABB=ON  PLU=ON  L28 NOT O/ELS
L30            1 SEA FILE=REGISTRY ABB=ON  PLU=ON  L29 AND C3 H11 N SI/MF
L36       156729 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L16 OR L18 OR  (?PROTEIN? OR
                  ?PEPTID?)(5A)(?ASSOCIAT? OR ?COUPL? OR MICROSPOT? OR ?ARRAY?)
L37       668665 SEA FILE=HCAPLUS ABB=ON  PLU=ON  ?MEMBRAN? OR ?BILAYER? OR
                  ?AMPHIPHILIC?(3A)?SURFAC? OR ?PROTEIN?(3A)SPAN?
L38       289077 SEA FILE=HCAPLUS ABB=ON  PLU=ON  ?PRINT? OR QUILL? OR QUILL-PIN
                   OR SPOT? OR MICROSPOT?
L39      1041533 SEA FILE=HCAPLUS ABB=ON  PLU=ON  GLASS OR SILICA OR QUARTZ
L40           73 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L30
L41        43272 SEA FILE=HCAPLUS ABB=ON  PLU=ON  G-PROTEIN
L42          349 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L36 AND L37 AND L38
L43            1 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L42 AND L40
L44            1 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L39 AND L43
L45            1 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L44 AND L41
L46           14 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L42 AND L39
L47            2 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L46 AND L41
L48            1 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L47 NOT (L45 OR L12)
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search for claim 1

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=> d bib abs

L48  ANSWER 1 OF 1  HCAPLUS  COPYRIGHT 2002 ACS
AN   1997:750011  HCAPLUS
DN   127:356669
TI   Hydrophobic peptide mapping of clinically relevant heptathelical
     membrane proteins by capillary electrophoresis
AU   Dong, Maoqing; Oda, Robert P.; Strausbauch, Michael A.; Wettstein, Peter
     J.; Landers, James P.; Miller, Laurence J.
CS   Center Basic Research Digestive Diseases, Mayo Clinic, Rochester, MN,
     55905, USA
SO   Electrophoresis (1997), 18(10), 1767-1774
     CODEN: ELCTDN; ISSN: 0173-0835
PB   Wiley-VCH Verlag GmbH
DT   Journal
LA   English
```

AB The structural investigation of **G protein-coupled** receptors was hindered by the lack of techniques to effectively resolve the hydrophobic peptides obtained by chem. or proteolytic cleavage, as well as the minute amts. of protein typically isolated. A capillary electrophoresis method was developed for efficient sepn. of hydrophobic peptides using a cyanogen bromide digest of bacteriorhodopsin as a model for these clin. important **membrane** proteins. This procedure includes (i) solubilization of the protein digest in acetic acid; and (ii) electrophoresis using an acetic acid-based buffer system augmented by acetonitrile and hexane sulfonic acid, in a polybrene-coated fused **silica** capillary. The potential for detection sensitivity to be increased at least 100-fold by use of online solid-phase extn. on C18-**silica** is shown. This approach is potentially useful for peptide **fingerprinting** of sparse and extremely hydrophobic **membrane** receptors.

=> d ibib abs 1

L54 ANSWER 1 OF 9 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2001:748054 HCAPLUS
DOCUMENT NUMBER: 135:299485
TITLE: Compositions and methods for detecting and quantifying gene expression in microarrays
INVENTOR(S): Lowe, David G.; Marsters, James C., Jr.; Robbie, Edward P.; Smith, Victoria
PATENT ASSIGNEE(S): Genentech, Inc., USA
SOURCE: PCT Int. Appl., 54 pp.
CODEN: PIXXD2
DOCUMENT TYPE: **Patent**
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001075166	A2	20011011	WO 2001-US10482	20010330 <--

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2000-193767P P 20000331 <--

AB Compns. and methods for improving detection sensitivity in nucleic acid microarray anal. are disclosed, including methods of purifying nucleic acids, methods of synthesizing fluorescent DNA probes, methods of hybridization, and methods of activating a substrate for target mol. attachment. The compns. and methods of this invention include synthesis of cDNA, sDNA, or cRNA probes from cellular RNA by in vitro transcription and/or a single-round of reverse transcription with incorporation of fluorochromes. Specific procedures for microarray slide prepn. to decrease background fluorescence are given. For example, silanization of **glass** slides with toluene as the solvent is preferred. In addn., unmodified polynucleotides can attach to a **glass** slide treated with 3-aminopropyltriethoxysilane followed by phenylene diisothiocyanate. Modified target DNA can also be synthesized using PCR primers which contain a primary amine and an alkyl linker attached to the 5'-end. The modified target DNA is then reacted with activated silanized **glass** slides. Microarray hybridization buffers contg. alkylammonium salts, dimethylsulfoxide and formamide and lacking the detergent sodium dodecyl sulfate also improved the detection sensitivity. The invention is illustrated with microarrays hybridized with fluorescent probes synthesized from very small quantities of RNA isolated from microdissected tumor cells, paraffin-embedded liver and colon tissue, fresh frozen liver tissue, and fresh frozen colon tissue. The microarray expts. were designed to compare tissue sample prepn. methods and gene expression in tumor vs. healthy tissues. An example of the sensitivity of these methods shows a microarray hybridized with sDNA probes from one round of amplification of 2 pg of RNA from an ovarian carcinoma cell line.

=> d ibib abs 2

L54 ANSWER 2 OF 9 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2001:397169 HCAPLUS
DOCUMENT NUMBER: 135:2526
TITLE: Devices and methods for detecting analytes using electrosensor having capture reagent
INVENTOR(S): Zhang, Honghua
PATENT ASSIGNEE(S): Biotronic Technologies, Inc., USA
SOURCE: PCT Int. Appl., 74 pp.
CODEN: PIXXD2
DOCUMENT TYPE: **Patent**
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001038873	A2	20010531	WO 2000-US29748	20001027 <--

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 1999-167409P P 19991124 <--

AB The present invention relates to devices comprising electrosensors contg. capture reagents, their prepn., and their use for detecting preferably, quant. measurement, of analyte in a liq. sample. In particular, the invention relates to an enzyme electrosensor, e.g., electroimmunosensor, device for electrochem. detection and preferably, real-time measurement, which is suitable for use at point-of-care settings by unskilled personnel. Monoclonal antibody to prostate specific antigen (PSA) or to .alpha.-**fetoprotein** (AFP) was directly **immobilized** on a carbon sensor surface by applying a buffered antibody soln. contg. isopropanol. Immunosensors were assembled and used to det. PSA or AFP.

=> d ibib abs 3

L54 ANSWER 3 OF 9 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2000:824447 HCAPLUS
DOCUMENT NUMBER: 134:2337
TITLE: Immobilization of unmodified biopolymers to acyl fluoride activated substrates
INVENTOR(S): Matson, Robert S.; Milton, Raymond C.
PATENT ASSIGNEE(S): Beckman Coulter, Inc., USA
SOURCE: PCT Int. Appl., 41 pp.
CODEN: PIXXD2
DOCUMENT TYPE: **Patent**
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
WO 2000070088	A2	20001123	WO 2000-US12729	20000510	<--
WO 2000070088	A3	20020328			
W: JP					
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE					
US 6268141	B1	20010731	US 1999-312095	19990512	
US 2001039018	A1	20011108	US 2001-872052	20010531	<--

PRIORITY APPLN. INFO.: US 1999-312095 A 19990512 <--

AB A method of attaching unmodified biopolymers, particularly, unmodified polynucleotides, directly to a solid support is provided. The method includes the steps of (a) providing unmodified biopolymers; (b) providing a solid support having at least one surface comprising pendant acyl fluoride functionalities; and (c) contacting the unmodified biopolymers with the solid support under a condition sufficient for allowing the attachment of the biopolymers to the solid support. The unmodified biopolymers may be nucleic acids, polypeptides, proteins, carbohydrates, lipids and analogs thereof. The unmodified polynucleotides may be DNA, RNA or synthesized oligonucleotides. The DNA may be single or double stranded. A device including a solid support and unmodified biopolymers attached to the solid support by reaction with the pendant acyl fluoride functionalities of the solid support is also provided. The methods and devices of the present invention may be used in performing hybridization assays and immunoassays.

=> d kwic 3

L54 ANSWER 3 OF 9 HCAPLUS COPYRIGHT 2002 ACS
PRAI US 1999-312095 A 19990512 <--
DT **Patent**
ST immobilization unmodified biopolymer acyl fluoride substrate; nucleic acid immobilization acyl fluoride substrate; **protein immobilization** acyl fluoride substrate; hybridization assay oligonucleotide immobilized acyl fluoride substrate; immunoassay immobilization acyl fluoride substrate
IT **Proteins**, specific or class
RL: ANT (Analyte); ARG (Analytical reagent use); RCT (Reactant); ANST (Analytical study); RACT (Reactant or reagent); USES (Uses)
(A; **immobilization** of unmodified biopolymers to acyl fluoride activated substrates)
IT Ceramics
Composites
Films
Gels
Membranes, nonbiological
Plates
Threads
(as supports; immobilization of unmodified biopolymers to acyl fluoride activated substrates)
IT **Glass**, reactions
Metals, reactions
Natural fibers
Plastics, reactions
Polymers, reactions
RL: DEV (Device component use); RCT (Reactant); RACT (Reactant or reagent); USES (Uses)
(as supports; immobilization of unmodified biopolymers to acyl fluoride activated substrates)
IT **Printing** (nonimpact)
(electrochem. or electromagnetic; immobilization of unmodified biopolymers to acyl fluoride activated substrates)
IT Alkalinity
Apparatus
Immobilization, biochemical
Immunoassay
Ink-jet **printing**
Microtiter plates
Nucleic acid hybridization
Printing (nonimpact)
(immobilization of unmodified biopolymers to acyl fluoride activated substrates)
IT Antibodies
Biopolymers
Carbohydrates, analysis
Ligands
Lipids, analysis
Nucleic acids
Peptides, analysis
Polynucleotides
Proteins, general, analysis
Receptors
RL: ANT (Analyte); ARG (Analytical reagent use); RCT (Reactant); ANST (Analytical study); RACT (Reactant or reagent); USES (Uses)
(**immobilization** of unmodified biopolymers to acyl fluoride

activated substrates)

IT **Peptide** nucleic acids
RL: RCT (Reactant); RACT (Reactant or reagent)
(**immobilization** of unmodified biopolymers to acyl fluoride activated substrates)

IT **Printing** (nonimpact)
(silk-screen; immobilization of unmodified biopolymers to acyl fluoride activated substrates)

IT 25053-53-6DP, Ethylene methacrylic acid copolymer, acyl fluoride activated, reaction products with oligonucleotide primers
RL: ARG (Analytical reagent use); DEV (Device component use); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation); USES (Uses)
(**printed** array on Biotip; immobilization of unmodified biopolymers to acyl fluoride activated substrates)

=> d ibib abs 4

L54 ANSWER 4 OF 9 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1999:27864 HCAPLUS
DOCUMENT NUMBER: 130:78440
TITLE: Self-assembling peptide surfaces for cell patterning and interactions
INVENTOR(S): Zhang, Shuguang; Rich, Alexander; Yan, Lin; Whitesides, George
PATENT ASSIGNEE(S): Massachusetts Institute of Technology, USA; President and Fellows of Harvard College
SOURCE: PCT Int. Appl., 50 pp.
CODEN: PIXXD2
DOCUMENT TYPE: **Patent**
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
WO 9858967	A1	19981230	WO 1998-US13110	19980624	<--
W: CA, JP					
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE					
US 6368877	B1	20020409	US 1997-882415	19970625	

PRIORITY APPLN. INFO.: US 1997-882415 A 19970625 <--
OTHER SOURCE(S): MARPAT 130:78440
AB This invention describes self-assembled monolayers (SAMs) manufd. by **imprinting** reactive peptides onto solid supports. The invention further relates to methods of prepg. and using these improved SAMs. A polydimethylsiloxane stamp was prepd., inked with (1-mercaptoundec-11-yl)hexa(ethylene glycol) in ethanol, and placed on a gold-coated **glass** chip. After 1 min, the stamp was peeled off the chip. The chip was immersed in a soln. contg. (RADC)3AAAC peptide. Cells of various types attached very well when plated on the **peptide**-coated **chip**.
REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d ibib abs 5

L54 ANSWER 5 OF 9 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1993:667460 HCAPLUS
DOCUMENT NUMBER: 119:267460
TITLE: Association of the actin cytoskeleton with **glass**-adherent proteins in mouse peritoneal macrophages
AUTHOR(S): Ono, Michio; Murakami, Tohru; Tomita, Mitsuko; Ishikawa, Harunori
CORPORATE SOURCE: Sch. Med., Gunma Univ., Maebashi, 371, Japan
SOURCE: Biol. Cell (**1993**), 77(2), 219-30
CODEN: BCELDF; ISSN: 0248-4900
DOCUMENT TYPE: Journal
LANGUAGE: English

AB When mouse peritoneal macrophages adherent to a **glass** surface were removed by treatment with triethanolamine and Nonidet P-40, fine thread structures of unique loops were left behind on **glass** at the sites of cell adhesion. To examine the ultrastructural relationship between such looped threads and cytoskeletal components in **glass** -adherent macrophages, the authors successfully used the zinc method to remove most of the cytoplasm including nuclei and to expose the cytoskeleton assocd. with the ventral plasma **membrane**. The cytoskeleton was seen to be mainly composed of actin filaments forming dense networks. The network contained scattered star-like foci from which actin filaments radiated. When the ventral plasma **membrane** -cytoskeleton complex was further treated with Nonidet P-40, the **membrane** was dissolved to expose the **glass** surface with actin foci persisting on **glass**. When the complex was removed by further treatment with Nonidet P-40 and DNase I, the looped threads became visible. Confocal laser microscopy of **glass**-adherent macrophages stained with fluorescent phalloidin showed the preferential distribution of F-actin in the ventral cytoplasm along the plasma **membrane**, where intense fluorescent **spots** were also scattered. Confocal interference reflection microscopy revealed densely populated dark dots and striae of focal contact, which corresponded in overall distribution to actin foci and looped threads. These observations suggest that actin cytoskeleton is closely assocd. with looped threads to reinforce cell adhesion to **glass**.

=> d ibib abs 6

L54 ANSWER 6 OF 9 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1989:629470 HCAPLUS
DOCUMENT NUMBER: 111:229470
TITLE: Immunochemical characterization of three components of the hemidesmosome and their expression in cultured epithelial cells
AUTHOR(S): Klatte, David H.; Kurpakus, Michelle A.; Grelling, Kent A.; Jones, Jonathan C. R.
CORPORATE SOURCE: Med. Sch., Northwestern Univ., Chicago, IL, 60611, USA
SOURCE: J. Cell Biol. (**1989**), 109(6, Pt. 2), 3377-90
CODEN: JCLBA3; ISSN: 0021-9525
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Treatment of bovine tongue mucosa with 1M KCl induced a split in the lamina densa of the basement **membrane** zone (BMZ). The epithelium was then sepd. from the underlying connective tissue. Electron microscopic anal. of the stripped epithelium revealed that hemidesmosomes and their assocd. intermediate filaments (IF) remain along the basal surface of the epithelium. This surface was solubilized in an SDS/urea-contg. buffer. Characterization of components of this protein mixt. was undertaken by using human autoantibodies from bullous pemphigoid (BP) patients which have been shown to recognize hemidesmosomal plaque elements (Mutasin, E. F.; et al., 1985) and by prodn. of monoclonal antibodies. Affinity-purified autoantibodies directed against 180- and 240-kD polypeptides present in the protein prepn. generated strong immunofluorescence staining pattern staining patterns along the BMZ of bovine tongue mucosa. Furthermore, immuno-Au localization revealed that these 2 **polypeptides** are **assocd**. with the hemidesmesomal plaque. A monoclonal antibody prepn. directed against a 125-kD polypeptide present in the same protein mixt. was also localized to the hemidesmosome. Autoantibodies in BP serum samples, affinity-purified 180-kD autoantibodies, and the monoclonal antibody prepn. generated a punctate stain along the substratum-attached surface of epithelial cells maintained on **glass** substrata for .apprx.1 wk. The **spots** appeared to be assocd. with bundles of IF in cultured mouse keratinocytes. These monospecific antibody probes should prove invaluable for the study of hemidesmosome structure, assembly, and function.

=> d ibib abs 7

L54 ANSWER 7 OF 9 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1989:91640 HCAPLUS
DOCUMENT NUMBER: 110:91640
TITLE: Identification of mouse brain proteins after two-dimensional electrophoresis and electroblotting by microsequence analysis and amino acid composition analysis
AUTHOR(S): Eckerskorn, Christoph; Jungblut, Peter; Mewes, Werner; Klose, Joachim; Lottspeich, Friedrich
CORPORATE SOURCE: Genzentrum, Max-Planck Inst. Biochem., Martinsried, Fed. Rep. Ger.
SOURCE: Electrophoresis (Weinheim, Fed. Repub. Ger.) (**1988**), 9(12), 830-8
CODEN: ELCTDN; ISSN: 0173-0835
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Two-dimensional electrophoresis sepn. and **immobilization** of **proteins** onto inert **membranes** for subsequent amino acid sequennce and amino acid compn. anal. is described as a rapid procedure for the identification or characterization of proteins from complex mixts. This method avoids the drawbacks of classical purifn. and isolation methods which involved time-consuming operations with low resoln. and, often, insufficient yields. Excellent overall yields of minor amts. (in the low microgram range) using this method allow for sequence detn. of yet inaccessible proteins. Solubilized cell proteins of mouse brain were sepd. by high resoln. two-dimensional electrophoresis and electroblotted onto a siliconized **glass** fiber **membrane**. The **immobilized proteins** were stained with Coomassie Brilliant Blue R-250, and 12 proteins **spots** were then submitted to both Edman degrdn. and amino acid anals. Proteins were identified by comparison of the exptl. detd. amino acid compn. with a dataset derived from the Protein Identification Resource (PIR) protein sequence database. Eight out of 12 proteins tested were identified by amino acid anal. and confirmed by N-terminal sequence detn.

=> d ibib abs 8

L54 ANSWER 8 OF 9 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1987:492983 HCAPLUS
DOCUMENT NUMBER: 107:92983
TITLE: Sequence from picomole quantities of proteins electroblotted onto polyvinylidene difluoride **membranes**
AUTHOR(S): Matsudaira, Paul
CORPORATE SOURCE: Whitehead Inst. Biomed. Res., Massachusetts Inst. Technol., Cambridge, MA, 02142, USA
SOURCE: J. Biol. Chem. (**1987**), 262(21), 10035-8
CODEN: JBCHA3; ISSN: 0021-9258
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Small amts. (7-250 pmol) of myoglobin, .beta.-lactoglobulin, and other proteins and peptides can be **spotted** or electroblotted onto PVDF **membranes**, stained with Coomassie Blue, and sequenced directly. The **membranes** are not chem. activated or pretreated with Polybrene before use. The av. repetitive yields and initial **coupling** of **proteins spotted** or blotted into PVDF **membranes** ranged 84-98 and 30-108%, resp., and were comparable with the yields measured for proteins **spotted** onto Polybrene-coated **glass** fiber disks. The PVDF **membranes** are superior supports for sequence anal. of picomole quantities of proteins purified by gel electrophoresis.

=> d ibib abs 9

L54 ANSWER 9 OF 9 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1985:592695 HCAPLUS
DOCUMENT NUMBER: 103:192695
TITLE: Protein-blotting on polybrene-coated **glass** -fiber sheets. A basis for acid hydrolysis and gas-phase sequencing of picomole quantities of protein previously separated on sodium dodecyl sulfate/polyacrylamide gel
AUTHOR(S): Vandekerckhove, Joel; Bauw, Guy; Puype, Magda; Van Damme, Jozef; Van Montagu, Marc
CORPORATE SOURCE: Lab. Genet., State Univ. Ghent, Ghent, B-9000, Belg.
SOURCE: Eur. J. Biochem. (**1985**), 152(1), 9-19
CODEN: EJBCAI; ISSN: 0014-2956
DOCUMENT TYPE: Journal
LANGUAGE: English
AB A procedure has been developed which allows the immobilization on **glass**-fiber sheets coated with the polyquaternary amine, Polybrene, of proteins and protein fragments previously sepd. on SDS-contg. polyacrylamide gels. The transfer is carried out essentially as has been used for protein blotting on nitrocellulose **membranes** (Towbin, H., et al., 1979), but is now used to det. the amino acid compn. and partial sequence of the **immobilized proteins**. Protein transfer could be carried out after staining the proteins in the gels with Coomassie blue, by which **immobilized proteins** are visible as blue **spots**, or without previous staining, after which transferred proteins are detected as fluorescent **spots** following reaction with fluorescamine. The latter procedure was found to be more efficient and yielded binding capacities of .+-.20 .mu.g/cm2. Fluorescamine detection was of equal or higher sensitivity than the classical Coomassie staining of proteins in the gel. **Immobilized proteins** could be hydrolyzed when still present on the **glass** fiber and reliable amino acid compns. were obtained for various ref. **proteins immobilized** is <100 pmol quantities. In addn., and more importantly, **glass**-fiber-bound proteins could be subjected to the Edman degrdn. procedure by simply cutting out the area of the sheet carrying the **immobilized protein** and mounting the disk in the reaction chamber of the gas-phase sequenator. Results of this immobilization-sequencing technique are shown for immobilized myoglobin (1 nmol) and 2 proteolytic fragments of actin (.+-.80 pmol each) previously sepd. on a SDS-contg. gel.

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=> d que l57
L1            65 SEA FILE=HCAPLUS ABB=ON  PLU=ON  LAHIRI J?/AU
L2          2088 SEA FILE=HCAPLUS ABB=ON  PLU=ON  FANG Y?/AU
L3           122 SEA FILE=HCAPLUS ABB=ON  PLU=ON  JONAS S?/AU
L4            19 SEA FILE=HCAPLUS ABB=ON  PLU=ON  KALAL P?/AU
L5         10759 SEA FILE=HCAPLUS ABB=ON  PLU=ON  WANG W?/AU
L6         13029 SEA FILE=HCAPLUS ABB=ON  PLU=ON  (L1 OR L2 OR L3 OR L4 OR L5)
L7           526 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L6 AND ?MEMBRANE?
L8            27 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L7 AND ASSAY?
L9             3 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L8 AND (CHIP OR ?ARRAY? OR
                 SURFACE OR ?SILAN? OR GLASS)
L10           24 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L8 NOT L9
L11            1 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L10 AND LIGAND(2A)BIND?
L12            4 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L9 OR L11
L16          509 SEA FILE=HCAPLUS ABB=ON  PLU=ON  (?PROTEIN? OR ?PEPTID?)(2A)CHI
                 P
L18        24061 SEA FILE=HCAPLUS ABB=ON  PLU=ON  (?PROTEIN? OR ?PEPTID?)(5A)(?I
                 MMOB? OR ATTACH? OR SPAN? OR FIX OR FIXED OR FIXING)
L23       141484 SEA FILE=REGISTRY ABB=ON  PLU=ON  "SILANE"
L24        25828 SEA FILE=REGISTRY ABB=ON  PLU=ON  "AMINOPROPYL"
L25          569 SEA FILE=REGISTRY ABB=ON  PLU=ON  L23 AND L24
L26          220 SEA FILE=REGISTRY ABB=ON  PLU=ON  L25 AND "GAMMA"
L27           57 SEA FILE=REGISTRY ABB=ON  PLU=ON  L26 AND NC=1 NOT PMS/CI
L28           43 SEA FILE=REGISTRY ABB=ON  PLU=ON  L27 NOT RSD/FA
L29            3 SEA FILE=REGISTRY ABB=ON  PLU=ON  L28 NOT O/ELS
L30            1 SEA FILE=REGISTRY ABB=ON  PLU=ON  L29 AND C3 H11 N SI/MF
L36       156729 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L16 OR L18 OR  (?PROTEIN? OR
                 ?PEPTID?)(5A)(?ASSOCIAT? OR ?COUPL? OR MICROSPOT? OR ?ARRAY?)
L37       668665 SEA FILE=HCAPLUS ABB=ON  PLU=ON  ?MEMBRAN? OR ?BILAYER? OR
                 ?AMPHIPHILIC?(3A)?SURFAC? OR ?PROTEIN?(3A)SPAN?
L38       289077 SEA FILE=HCAPLUS ABB=ON  PLU=ON  ?PRINT? OR QUILL? OR QUILL-PIN
                  OR SPOT? OR MICROSPOT?
L39      1041533 SEA FILE=HCAPLUS ABB=ON  PLU=ON  GLASS OR SILICA OR QUARTZ
L40           73 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L30
L41        43272 SEA FILE=HCAPLUS ABB=ON  PLU=ON  G-PROTEIN
L42          349 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L36 AND L37 AND L38
L43            1 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L42 AND L40
L44            1 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L39 AND L43
L45            1 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L44 AND L41
L46           14 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L42 AND L39
L47            2 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L46 AND L41
L48            1 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L47 NOT (L45 OR L12)
L55           11 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L39 AND L38 AND L41
L56            9 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L55 NOT (L46 OR L12 OR L48)
L57            3 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L56 AND (L36 OR L37)
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3 cites

Claim 1+3 looking for array & method of making

=> d ibib abs 1

L57 ANSWER 1 OF 3 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2001:816981 HCAPLUS
DOCUMENT NUMBER: 135:341205
TITLE: Colloid compositions for solid phase biomolecular analytical, preparative and identification systems
INVENTOR(S): Audeh, Zuheir L.; Fici, Dolores A.; McCormick, William
PATENT ASSIGNEE(S): The Center for Blood Research, Inc., USA
SOURCE: PCT Int. Appl., 50 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001083825	A2	20011108	WO 2001-US14373	20010504
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 2002015958	A1	20020207	US 2001-848777	20010504

PRIORITY APPLN. INFO.: US 2000-201908P P 20000504

AB A liq. compn. comprising a colloidal suspension of a biomol.-binding matrix material (preferably nitrocellulose) dispersed in a liq., with particles of the matrix material being of a defined particle size, and replicate copies of a biomol., e.g., **protein** or nucleic acid probes, which are distributed, preferably uniformly, throughout the colloidal suspension and are bound to the matrix material particles, is disclosed. The liq. compn. of the invention can be used directly for sample anal. or prepn. of biomols., or aliquots of the compn. can be **spotted** onto a support to form a microporous matrix system or microarray for anal. or prepn. of biomols. Compns. and microarrays according to the invention are useful in any type of anal. or preparative procedure relating to biomols. They are particularly useful, e.g., in methods for detecting a biomol. analyte in a liq. sample, methods for detg. the presence of a particular nucleic acid sequence within a liq. sample and methods for detg. the presence of a drug candidate mol. in a liq. sample. The invention further comprises kits for practicing the various methods of the invention. Nitrocellulose colloidal suspensions were used to prep. DNA and **protein microarrays** for HLA typing and for detg. specific antibodies to disease antigens, resp.

=> d ibib abs 2

L57 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2001:12731 HCAPLUS
DOCUMENT NUMBER: 134:68420
TITLE: Arrays of biopolymeric binding agents and method for their production and use
INVENTOR(S): Charych, Deborah
PATENT ASSIGNEE(S): Chiron Corporation, USA
SOURCE: PCT Int. Appl., 42 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001001142	A2	20010104	WO 2000-US16894	20000619
WO 2001001142	A3	20010830		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 1999-141469P A2 19990629
AB Arrays of biopolymeric binding agents, as well as methods for their fabrication and use, are provided. The subject arrays are characterized having at least two non-modified biopolymeric binding agents, e.g. **proteins**, nucleic acids, etc., bound to the hydrophilic surface of a spacer layer present on a planar surface of a solid support, where the spacer layer at least includes a self-assembled monolayer. The subject arrays find use in a variety of different binding assay applications. Also provided are kits including the subject arrays. Using a robotic array **spotter**, DNA PCR products were **spotted** onto a layer of self-assembled mercaptoundecanoic acid on a gold surface-coated **glass** substrate. After **spotting**, the slides were UV crosslinked and baked and prehybridized before hybridization with labeled probes.

=> d ibib abs 3

L57 ANSWER 3 OF 3 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2000:41102 HCAPLUS
DOCUMENT NUMBER: 132:171047
TITLE: Different kinetics of the respiratory burst response in granulocytes, induced by serum from blood coagulated in contact with polymer materials
AUTHOR(S): Nygren, Hakan; Braide, Magnus; Karlsson, Christin
CORPORATE SOURCE: Applied Cell Biology, Department of Anatomy and Cell Biology, University of Goteborg, Goteborg, SE-40530, Swed.
SOURCE: Biomaterials (1999), Volume Date 2000, 21(2), 173-182
CODEN: BIMADU; ISSN: 0142-9612

PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Tubes of different polymer materials were filled with blood collected by venous puncture. The blood was allowed to clot for 10 min, and the serum was collected. Complement activation was demonstrated through assessment of the C3-level by radial immunodiffusion. Phospholipid **fingerprints** were made after lipid extn. of serum and sepn. by TLC. The granulocyte fraction of venous blood was sepd. on a Percoll gradient and the cells were either loaded with a calcium probe, or incubated with luminol. These cells were used as a biol. test for inflammatory mediators. Serum from blood coagulated in contact with different materials was added to the test cells. The intracellular calcium level was recorded by Calcium Green-1 fluorescence and the respiratory burst of the test cells was recorded by luminol-amplified chemiluminescence. Serum from blood coagulated in contact with **glass** tubes, methylised **glass** tubes and teflon (PTFE) tubes induced a transient increase of the cellular calcium level, indicating a **G protein-coupled** activation of the test cells. Serum from blood coagulated in contact with **glass** tubes, methylised **glass** tubes, and PTFE tubes primed the test cells for a subsequent f-MLP response. Serum from blood coagulated in contact with polyurethane and polypropylene induced a direct biphasic respiratory burst response in the test cells and serum from blood coagulated in contact with methylised **glass** induced a direct monophasic respiratory burst response in the test cells. Complement activation was demonstrated after blood contact with hydrophobic **glass** and PTFE. Different **fingerprints** of phospholipid content were found in sera after blood contact with different materials. The data show that different inflammatory mediators are released during blood coagulation in contact with different materials. The method may be valuable as a screening test for blood compatibility of materials.

REFERENCE COUNT: 57 THERE ARE 57 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L40           73 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L30
L41        43272 SEA FILE=HCAPLUS ABB=ON  PLU=ON  G-PROTEIN
L42          349 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L36 AND L37 AND L38
L43            1 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L42 AND L40
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L45            1 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L44 AND L41
L46           14 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L42 AND L39
L47            2 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L46 AND L41
L48            1 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L47 NOT (L45 OR L12)
L58          349 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L36 AND L37 AND L38
L59            5 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L58 AND CHIP
L60           16 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L58 AND MICROARRAY
L61           19 SEA FILE=HCAPLUS ABB=ON  PLU=ON  (L59 OR L60)
L62            4 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L61 AND L41
L63            2 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L62 NOT  (L46 OR L12 OR L48)
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2 cites

looking for ?mmob, w/ G protein on a chip

=> d ibib abs 1

L63 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2000:759895 HCAPLUS
DOCUMENT NUMBER: 134:28172
TITLE: The expression of adipogenic genes is decreased in obesity and diabetes mellitus
AUTHOR(S): Nadler, Samuel T.; Stoehr, Jonathan P.; Schueler, Kathryn L.; Tanimoto, Gene; Yandell, Brian S.; Attie, Alan D.
CORPORATE SOURCE: Department of Biochemistry, University of Wisconsin, Madison, WI, 53706, USA
SOURCE: Proceedings of the National Academy of Sciences of the United States of America (2000), 97(21), 11371-11376
CODEN: PNASA6; ISSN: 0027-8424
PUBLISHER: National Academy of Sciences
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Obesity is strongly correlated with type 2 diabetes mellitus, a common disorder of glucose and lipid metab. Although adipocytes are crit. in obesity, their role in diabetes has only recently been appreciated. The authors conducted studies by using DNA **microarrays** to identify differences in gene expression in adipose tissue from lean, obese, and obese-diabetic mice. The expression level of over 11,000 transcripts was analyzed, and 214 transcripts showed significant differences between lean and obese mice. Surprisingly, the expression of genes normally assocd. with adipocyte differentiation were down-regulated in obesity. Not all obese individuals will become diabetic; many remain normoglycemic despite profound obesity. Understanding the transition to obesity with concomitant diabetes will provide important clues to the pathogenesis of type 2 diabetes. Therefore, the authors examd. the levels of gene expression in adipose tissue from five groups of obese mice with varying degrees of hyperglycemia, and the authors identified 88 genes whose expression strongly correlated with diabetes severity. This group included many genes that are known to be involved in signal transduction and energy metab. as well as genes not previously examd. in the context of diabetes. The authors' data show that a decrease in expression of genes normally involved in adipogenesis is assocd. with obesity, and the authors further identify genes important for subsequent development of type 2 diabetes mellitus.
REFERENCE COUNT: 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d ibib abs 2

L63 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1999:720569 HCAPLUS
DOCUMENT NUMBER: 132:47182
TITLE: Micropatterned **immobilization** of a **G protein-coupled** receptor and direct detection of **G protein** activation
AUTHOR(S): Bieri, Christoph; Ernst, Oliver P.; Heyse, Stephan; Hofmann, Klaus Peter; Vogel, Horst
CORPORATE SOURCE: Laboratory for Physical Chemistry of Polymers and Membranes, Swiss Federal Institute of Technology, Lausanne, CH-1015, Switz.
SOURCE: Nature Biotechnology (1999), 17(11), 1105-1108
CODEN: NABIF9; ISSN: 1087-0156
PUBLISHER: Nature America
DOCUMENT TYPE: Journal
LANGUAGE: English
AB **G protein-coupled** receptors (GPCRs) constitute an abundant family of **membrane** receptors of high pharmacol. interest. Cell-based assays are the predominant means of assessing GPCR activation, but are limited by their inherent complexity. Functional mol. assays that directly and specifically report **G protein** activation by receptors could offer substantial advantages. We present an approach to immobilize receptors stably and with defined orientation to substrates. By surface plasmon resonance (SPR), we were able to follow ligand binding, **G protein** activation, and receptor deactivation of a representative GPCR, bovine rhodopsin. Microcontact **printing** was used to produce micrometer-sized patterns with high contrast in receptor activity. These patterns can be used for local referencing to enhance the sensitivity of **chip**-based assays. The immobilized receptor was stable both for hours and during several activation cycles. A ligand dose-response curve with the photoactivatable agonist 11-cis-retinal showed a half-maximal signal at 120 nM. Our findings may be useful to develop novel assay formats for GPCRs based on receptor immobilization to solid supports, particularly to sensor surfaces.
REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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=> d que 166
L1            65 SEA FILE=HCAPLUS ABB=ON  PLU=ON  LAHIRI J?/AU
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L6         13029 SEA FILE=HCAPLUS ABB=ON  PLU=ON  (L1 OR L2 OR L3 OR L4 OR L5)
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L26          220 SEA FILE=REGISTRY ABB=ON  PLU=ON  L25 AND "GAMMA"
L27           57 SEA FILE=REGISTRY ABB=ON  PLU=ON  L26 AND NC=1 NOT PMS/CI
L28           43 SEA FILE=REGISTRY ABB=ON  PLU=ON  L27 NOT RSD/FA
L29            3 SEA FILE=REGISTRY ABB=ON  PLU=ON  L28 NOT O/ELS
L30            1 SEA FILE=REGISTRY ABB=ON  PLU=ON  L29 AND C3 H11 N SI/MF
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L41        43272 SEA FILE=HCAPLUS ABB=ON  PLU=ON  G-PROTEIN
L42          349 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L36 AND L37 AND L38
L43            1 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L42 AND L40
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L45            1 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L44 AND L41
L46           14 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L42 AND L39
L47            2 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L46 AND L41
L48            1 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L47 NOT (L45 OR L12)
L58          349 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L36 AND L37 AND L38
L59            5 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L58 AND CHIP
L60           16 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L58 AND MICROARRAY
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2 cites

claim 1 & 3

=> d bib abs

L66 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2002 ACS
AN 2001:748054 HCAPLUS
DN 135:299485
TI Compositions and methods for detecting and quantifying gene expression in **microarrays**
IN Lowe, David G.; Marsters, James C., Jr.; Robbie, Edward P.; Smith, Victoria
PA Genentech, Inc., USA
SO PCT Int. Appl., 54 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001075166	A2	20011011	WO 2001-US10482	20010330 <--

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RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRAI US 2000-193767P P 20000331 <--
AB Compns. and methods for improving detection sensitivity in nucleic acid **microarray** anal. are disclosed, including methods of purifying nucleic acids, methods of synthesizing fluorescent DNA probes, methods of hybridization, and methods of activating a substrate for target mol. attachment. The compns. and methods of this invention include synthesis of cDNA, sDNA, or cRNA probes from cellular RNA by in vitro transcription and/or a single-round of reverse transcription with incorporation of fluorochromes. Specific procedures for **microarray** slide prepn. to decrease background fluorescence are given. For example, silanization of **glass** slides with toluene as the solvent is preferred. In addn., unmodified polynucleotides can attach to a **glass** slide treated with 3-aminopropyltriethoxysilane followed by phenylene diisothiocyanate. Modified target DNA can also be synthesized using PCR primers which contain a primary amine and an alkyl linker attached to the 5'-end. The modified target DNA is then reacted with activated silanized **glass** slides. **Microarray** hybridization buffers contg. alkylammonium salts, dimethylsulfoxide and formamide and lacking the detergent sodium dodecyl sulfate also improved the detection sensitivity. The invention is illustrated with **microarrays** hybridized with fluorescent probes synthesized from very small quantities of RNA isolated from microdissected tumor cells, paraffin-embedded liver and colon tissue, fresh frozen liver tissue, and fresh frozen colon tissue. The **microarray** expts. were designed to compare tissue sample prepn. methods and gene expression in tumor vs. healthy tissues. An example of the sensitivity of these methods shows a **microarray** hybridized with sDNA probes from one round of amplification of 2 pg of RNA from an ovarian carcinoma cell line.

=> d bib abs 2

L66 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2002 ACS
AN 1999:27864 HCAPLUS
DN 130:78440
TI Self-assembling peptide surfaces for cell patterning and interactions
IN Zhang, Shuguang; Rich, Alexander; Yan, Lin; Whitesides, George
PA Massachusetts Institute of Technology, USA; President and Fellows of Harvard College
SO PCT Int. Appl., 50 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

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PI	WO 9858967	A1	19981230	WO 1998-US13110	19980624 <--
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	US 6368877	B1	20020409	US 1997-882415	19970625
PRAI	US 1997-882415	A	19970625 <--		

OS MARPAT 130:78440
AB This invention describes self-assembled monolayers (SAMs) manufd. by **imprinting** reactive peptides onto solid supports. The invention further relates to methods of prepg. and using these improved SAMs. A polydimethylsiloxane stamp was prepd., inked with (1-mercaptoundec-11-yl)hexa(ethylene glycol) in ethanol, and placed on a gold-coated **glass chip**. After 1 min, the stamp was peeled off the **chip**. The **chip** was immersed in a soln. contg. (RADC)3AAAC peptide. Cells of various types attached very well when plated on the **peptide**-coated **chip**.
RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L26          220 SEA FILE=REGISTRY ABB=ON  PLU=ON  L25 AND "GAMMA"
L27           57 SEA FILE=REGISTRY ABB=ON  PLU=ON  L26 AND NC=1 NOT PMS/CI
L28           43 SEA FILE=REGISTRY ABB=ON  PLU=ON  L27 NOT RSD/FA
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L41        43272 SEA FILE=HCAPLUS ABB=ON  PLU=ON  G-PROTEIN
L42          349 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L36 AND L37 AND L38
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L45            1 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L44 AND L41
L46           14 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L42 AND L39
L47            2 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L46 AND L41
L48            1 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L47 NOT (L45 OR L12)
L68            4 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L40 AND (L38 OR L41 OR (L36
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3 cites

cl 1 & 3 - use of γ-aminopropylsilane for coating glass & protein attachment

=> d ibib abs hitstr 1

L69 ANSWER 1 OF 3 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2001:904732 HCAPLUS
DOCUMENT NUMBER: 136:34316
TITLE: Microarrays for performing proteomic analyses
INVENTOR(S): Charych, Deborah; Beausoleil, Eric; Zuckermann, Ronald N.
PATENT ASSIGNEE(S): Chiron Corporation, USA
SOURCE: PCT Int. Appl., 60 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001094946	A2	20011213	WO 2001-US18066	20010604

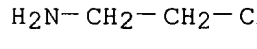
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2000-209711P P 20000605

AB Provided are **peptidomimetic protein**-binding **arrays**, their manuf., use, and application. The **protein**-binding **array** elements of the invention include a peptidomimetic segment linked to a solid support via a stable anchor. The invention contemplates **peptidomimetic array** element library synthesis, distribution, and **spotting** of array elements onto solid planar substrates, labeling of complex protein mixts., and the anal. of differential **protein** binding to the **array**. The invention also enables the enrichment or purifn., and subsequent sequencing or structural anal. of proteins that are identified as differential by the array screen. Kits including proteomic microarrays in accordance with the present invention are also provided.

IT **6382-82-7**, 3-Aminopropylsilane
RL: ARU (Analytical role, unclassified); ANST (Analytical study)
(microarrays for performing proteomic analyses)

RN 6382-82-7 HCAPLUS
CN 1-Propanamine, 3-silyl- (9CI) (CA INDEX NAME)

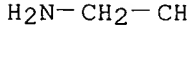


=> d ibib abs hitstr 2

L69 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1991:567239 HCAPLUS
DOCUMENT NUMBER: 115:167239
TITLE: Characterization of chemisorbed monolayers by surface potential measurements
AUTHOR(S): Taylor, D. M.; Morgan, H.; D'Silva, C.
CORPORATE SOURCE: Inst. Mol. Biomol. Electron., Univ. Wales, Bangor, LL57 1UT, UK
SOURCE: J. Phys. D: Appl. Phys. (1991), 24(8), 1443-50
CODEN: JPAPBE; ISSN: 0022-3727
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Chemisorption was used to immobilize uniform, low-defect d. monolayers of (3-aminopropyl)silane and of d-biotin on evapd. gold substrates. The quality of the monolayers was confirmed by surface potential measurements and by copper decoration. Avidin was immobilized to these monolayers by (i) crosslinking to the (3-aminopropyl)silane with glutaraldehyde and (ii) binding directly to the biotin ligand. The changes in surface potential obsd. during each immobilization step are shown to be related directly to the mol. structure of each chemisorbed layer. Significantly, when the avidin is immobilized on the biotin monolayer the tetrameric protein is oriented with one pair of biotin binding sites on the upper surface of the protein monolayer. This allows the bifunctional ligand, 1,12-bis(biotinamide)dodecane to be bound to the **protein** giving the possibility of **attaching** further **protein** layers to form mol. organizates suitable for mol. electronic and mol. sensing applications.

IT **6382-82-7**
RL: PRP (Properties)
(chemisorbed, on gold, immobilization of avidin to)
RN 6382-82-7 HCAPLUS
CN 1-Propanamine, 3-silyl- (9CI) (CA INDEX NAME)



=> d ibib abs hitstr 3

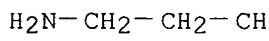
L69 ANSWER 3 OF 3 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1990:420511 HCAPLUS
DOCUMENT NUMBER: 113:20511
TITLE: **Immobilization** of **peptides**, **proteins** and ligands on silica using alkoxyalkyl silanes
INVENTOR(S): Capka, Martin; Fusek, Martin; Turkova, Jaroslava
PATENT ASSIGNEE(S): Czech.
SOURCE: Czech., 4 pp.
CODEN: CZXXA9
DOCUMENT TYPE: Patent
LANGUAGE: Czech
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CS 262454	B1	19890314	CS 1987-2311	19870401

OTHER SOURCE(S): MARPAT 113:20511

AB **Peptides, proteins**, and ligands are **immobilized** on SiO2 particles (5-500 nm) by pretreatment of SiO2 with silanes R1Si(R2)2R3 [R1 = (CH2)3NH2, (CH2)3SH, 3-(2',3'-epoxypropoxy)propyl; R2 = C1-4 alkoxy; R3 = R2, Me]. Thus, refluxing 10 g silica of particle size 5-20 nm with 4.5 mL (EtOCH2CH2O)3Si(CH2)3NH2 in PhMe for 3 h gave a carrier with covalently bound H2N(CH2)3 groups contg. 3.1% C. It was stirred (100 g) 5 h with a 1.5% glutaraldehyde soln. in a phosphate buffer soln., the activated carrier was washed, centrifuged, stirred 16 h in a soln. of 15 mg chymotrypsin in acetate buffer soln., and washed again. The carrier contained 7 mg chymotrypsin/100 mg silica showing 80% activity of native enzyme.

IT **6382-82-7D**, 3-(Amino)propyl silane, akoxy derivs.
RL: ANST (Analytical study)
(in **peptide** and **protein** and ligand **immobilization** on silica)
RN 6382-82-7 HCAPLUS
CN 1-Propanamine, 3-silyl- (9CI) (CA INDEX NAME)



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=> d que l79
L16          509 SEA FILE=HCAPLUS ABB=ON  PLU=ON  (?PROTEIN? OR ?PEPTID?)(2A)CHI
                 P
L18        24061 SEA FILE=HCAPLUS ABB=ON  PLU=ON  (?PROTEIN? OR ?PEPTID?)(5A)(?I
                 MMOB? OR ATTACH? OR SPAN? OR FIX OR FIXED OR FIXING)
L36       156729 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L16 OR L18 OR  (?PROTEIN? OR
                 ?PEPTID?)(5A)(?ASSOCIAT? OR ?COUPL? OR MICROSPOT? OR ?ARRAY?)
L70         9141 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L36(P)ASSAY?
L73          295 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L70 AND (CONTACT? OR SPOT? OR
                 MICROSPOT?)
L74           87 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L73 AND DETECT?
L75           12 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L74 AND TARGET
L76            9 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L74 AND PROBE
L77            4 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L75 AND L76
L78           16 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L74 AND SOLUTION
L79            2 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L77 AND L78
```

2 cites

looking for claim 2

=> d ibib abs 1

L79 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2002:51669 HCAPLUS
DOCUMENT NUMBER: 136:80846
TITLE: Dipstick assays with a set of different **probes** to **target** double-stranded DNA in sample **solution**
INVENTOR(S): Lee, Helen; Dineva, Magda Anastassova; Hu, Hsiang Yun
PATENT ASSIGNEE(S): UK
SOURCE: PCT Int. Appl., 70 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002004671	A2	20020117	WO 2001-GB3039	20010706

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: GB 2000-16836 A 20000707

AB Improved dipstick **assays** for testing for the presence of a **target** nucleic acid in a sample **soln.** are described. A chromatog. dipstick is provided which comprises a **contact** end for **contacting** the sample **soln.** and a capture zone, remote from the **contact** end, for capturing **target** nucleic acid. **Target** nucleic acid in the sample **soln.** is captured at the capture zone and is **detected** by a set of labeled oligonucleotides each capable of hybridizing to a different region of the **target** nucleic acid or these capture **probes** interact with a hook capture **probe** bound to the **target** nucleic acid. The capture **probe** is coupled to a linker by reaction of a phosphoramidite group attached to the linker with a hydroxyl group of the **probe** or by reaction of a hydroxyl group of the linker with a phosphoramidite group attached to the **probe.** A capture **probe** spacer separates the linker from the capture **probe** and the present invention demonstrates that longer spacers increase the sensitivity of **target** nucleic acid **detection.** The capture **probe** spacer may be a protein like bovine serum albumin or thyroglobulin. The linker is **coupled** to the **protein** by reaction of a primary amino group attached to the linker with a carboxyl group of the protein. Alternatively, a nucleotide can also serve as a capture **probe** spacer or the capture **probe** can be coupled to the nucleotide spacer which is then **coupled** to a **protein** to space the capture **probe** from the protein. The non protein is preferably 6 nucleotides in length. Use of the spacer increases the stability of the interaction between the capture **probe** and the **target** nucleic acid and improves signal strength. In other methods a plurality of different capture **probes** are added to the sample **soln**

. which can then be bound by a capture moiety at the capture zone to indirectly capture **target** nucleic acid. A **detection probe** capable of hybridizing to the **target** nucleic acid which can be releasably immobilized to a **probe** zone between the **contact** end and capture zone of the the dipstick is another embodiment of the invention. Also, the nucleic acid of interest could be coupled to a plurality of labels or ligands which can be bound by a ligand binding moiety to **detect** or capture the **target** nucleic acid when the **probe** has hybridized to the **target** nucleic acid. Using this method about 104 copies of Chlamydia trachomatis elementary bodies could be **detected** in less than an hour including the sample prepn. step. Although this **assay** has a sensitivity of **detected** about equal to other sandwich hybridization **assays**, it has the major advantages of speed and simplicity. Kits and dipsticks for carrying out such methods are also described.

=> d ibib abs 2

L79 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1990:511968 HCAPLUS
DOCUMENT NUMBER: 113:111968
TITLE: Methods, supports, and kits for multiple **target** analyses through nucleic acid hybridization
INVENTOR(S): Adams, Trevor H.; Schwartz, Dennis E.; Vermeulen, Nicolaas M. J.; Petrie, Charles R.
PATENT ASSIGNEE(S): Microprobe Corp., USA
SOURCE: PCT Int. Appl., 80 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9001564	A1	19900222	WO 1989-US3378	19890807
W: JP				
RW: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE				
PRIORITY APPLN. INFO.:			US 1988-230066	19880809
			US 1989-388202	19890804

AB Hybridization assays are provided wherein a multiplicity of different nucleic acid **probes** for the site-specific capture of **target** nucleic acids are conjugated to specific locations upon a single dipstick or device. The use of a dipstick has substantial mech. advantages over prior art formats for nucleic acid hybridizations. The dipsticks are composed of a handle and a nonporous support coated with a solid surface having .gtoreq.1 discrete region of nucleic acids covalently bound thereto. Also provided are means for covalently attaching nucleic acids to solid supports, improved hybridization buffers, improved support surfaces, methods for reducing nonspecific background, and methods for quantifying assay results. A multiple **target** dipstick for the **detection** of specific bacteria in patient plaque samples was prepd. by immobilizing 24-mer nucleotide species-specific sequences complementary to the hypervariable region of the 16S rRNAs from Actinobacillus actinomycetemcomitans, Bacteroides gingivalis, Eikenella corrodens, and Bacteroides intermedius in different slots on a Pall membrane derivatized with 2-aminoethanethiol. The 24-mers were synthesized possessing a 5'-terminal amine hexyl linker. The dipstick was placed in a sonicated **soln.** contg. lysing buffer and plaque sample, it was **contacted** with a **soln.** contg. biotinylated oligonucleotide universal sequence **probes**, and the filter was washed, reacted with streptavidin-peroxidase conjugate, and developed. One or all of the bacteria could be **detected** in a complex mixt. of cells and org. material.

TRAN 09/854,786

```
=> d que l93
L91          477 SEA FILE=HCAPLUS ABB=ON  PLU=ON  CHIP(P)ASSAY?
L92          126 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L91(P)SURFACE
L93           11 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L92(P)?MEMBRANE?
```

11 cites

looking for claim 2

=> d ibib abs 1

L93 ANSWER 1 OF 11 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2001:933617 HCAPLUS
DOCUMENT NUMBER: 136:49577
TITLE: Kinetic analysis of binding between Shiga toxin and receptor glycolipid Gb3Cer by surface plasmon resonance
AUTHOR(S): Nakajima, Hideki; Kiyokawa, Nobutaka; Katagiri, Yohko U.; Taguchi, Tomoko; Suzuki, Toyo; Sekino, Takaomi; Mimori, Kenichi; Ebata, Tomohiko; Saito, Masahiro; Nakao, Hiroshi; Takeda, Tae; Fujimoto, Junichiro
CORPORATE SOURCE: Department of Pathology, National Children's Medical Research Center, Tokyo, 154-8509, Japan
SOURCE: Journal of Biological Chemistry (2001), 276(46), 42915-42922
CODEN: JBCHA3; ISSN: 0021-9258
PUBLISHER: American Society for Biochemistry and Molecular Biology
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Shiga toxin (Stx) binds to the receptor glycolipid Gb3Cer on the cell **surface** and is responsible for hemolytic uremic syndrome. Stx has two isoforms, Stx1 and Stx2, and in clin. settings Stx2 is known to cause more severe symptoms, although the differences between the mechanisms of action of Stx1 and Stx2 are as yet unknown. In this study, the binding modes of these two isoforms to the receptor were investigated with a **surface** plasmon resonance analyzer to compare differences by real time receptor binding anal. A sensor **chip** having a lipophilically modified dextran matrix or quasicryst. hydrophobic layer was used to immobilize an amphipathic lipid layer that mimics the plasma **membrane surface**. Dose responsiveness was obsd. with both isoforms when either the toxin concn. or the Gb3Cer concn. was increased. In addn., this **assay** was shown to be specific, because neither Stx1 nor Stx2 bound to GM3, but both bound weakly to Gb4Cer. It was also shown that a no. of fitting models can be used to analyze the sensorgrams obtained with different concns. of the toxins, and the "bivalent analyte" model was found to best fit the interaction between Stxs and Gb3Cer. This shows that the interaction between Stxs and Gb3Cer in the lipid bilayer has a multivalent effect. The presence of cholesterol in the lipid bilayer significantly enhanced the binding of Stxs to Gb3Cer, although kinetics were unaffected. The assocn. and dissocn. rate consts. of Stx1 were larger than those of Stx2: Stx2 binds to the receptor more slowly than Stx1 but, once bound, is difficult to dissoc. The data described herein clearly demonstrate differences between the binding properties of Stx1 and Stx2 and may facilitate understanding of the differences in clin. manifestations caused by these toxins.

REFERENCE COUNT: 53 THERE ARE 53 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d ibib abs 2

L93 ANSWER 2 OF 11 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2001:638280 HCAPLUS
TITLE: Chip based biosensor for functional analysis of single ion channels
AUTHOR(S): Vogel, Horst
CORPORATE SOURCE: Department of Chemistry, Swiss Federal Institute of Technology Lausanne, Lausanne, N/A, Switz.
SOURCE: Abstracts of Papers, 222nd ACS National Meeting, Chicago, IL, United States, August 26-30, 2001 (2001), COLL-244. American Chemical Society: Washington, D. C.
CODEN: 69BUZP
DOCUMENT TYPE: Conference; Meeting Abstract
LANGUAGE: English

AB The functional anal. of single ion channel proteins presents a serious bottleneck in the process of finding new pharmacol. active compds. Currently available single channel recording methods are not suited for automation and miniaturization. However, new techniques such as combinatorial chem. and combinatorial genetics, which produce large amts. of potential drugs and mutant proteins, demand efficient and reliable screening as well as low sample consumption. Here we present a novel, silicon **chip**-based **assay** to probe the function of channel proteins. **Membrane** vesicles were electrophoretically positioned and fused across micrometer sized holes in the **chip surface**. Seal resistances up to 1000 G.OMEGA. obtained after a few seconds positioning time, allowed the detailed anal. of single ion channel currents. Std. sample vols. in the microliter range strongly reduce sample consumption, making the application of this technique in parallelized, highly sensitive biosensing devices for large-scale functional screening feasible.

=> d ibib abs 3

L93 ANSWER 3 OF 11 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2001:482509 HCAPLUS
DOCUMENT NUMBER: 135:282729
TITLE: Pentosan polysulfate as an inhibitor of extracellular HIV-1 Tat
AUTHOR(S): Rusnati, Marco; Urbinati, Chiara; Caputo, Antonella; Possati, Laura; Lortat-Jacob, Hugues; Giacca, Mauro; Ribatti, Domenico; Presta, Marco
CORPORATE SOURCE: Department of Biomedical Sciences and Biotechnology, School of Medicine, University of Brescia, Brescia, 25123, Italy
SOURCE: Journal of Biological Chemistry (2001), 276(25), 22420-22425
CODEN: JBCHA3; ISSN: 0021-9258
PUBLISHER: American Society for Biochemistry and Molecular Biology
DOCUMENT TYPE: Journal
LANGUAGE: English
AB HIV-1 Tat protein, released from HIV-infected cells, may act as a pleiotropic heparin-binding growth factor. From this observation, extracellular Tat has been implicated in the pathogenesis of AIDS and of AIDS-assocd. pathologies. Here we demonstrate that the heparin analog pentosan polysulfate (PPS) inhibits the interaction of glutathione S-transferase (GST)-Tat protein with heparin immobilized to a BIAcore sensor **chip**. Competition expts. showed that Tat-PPS interaction occurs with high affinity (Kd = 9.0 nM). Also, GST.cntdot.Tat prevents the binding of [3H]heparin to GST.cntdot.Tat immobilized to glutathione-agarose beads. In vitro, PPS inhibits GST.cntdot.Tat internalization and, consequently, HIV-1 long terminal repeat transactivation in HL3T1 cells. Also, PPS inhibits cell **surface** interaction and mitogenic activity of GST.cntdot.Tat in murine adenocarcinoma T53 Tat-less cells. In all **assays**, PPS exerts its Tat antagonist activity with an ID50 equal to .apprx.1.0 nM. In vivo, PPS inhibits the neovascularization induced by GST.cntdot.Tat or by Tat-overexpressing T53 cells in the chick embryo chorioallantoic **membrane**. In conclusion, PPS binds Tat protein and inhibits its cell **surface** interaction, internalization, and biol. activity in vitro and in vivo. PPS may represent a prototypic mol. for the development of novel Tat antagonists with therapeutic implications in AIDS and AIDS-assocd. pathologies, including Kaposi's sarcoma.
REFERENCE COUNT: 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d ibib abs 4

L93 ANSWER 4 OF 11 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2001:200681 HCAPLUS
TITLE: Micromachined fluid ejector arrays for biotechnological and biomedical applications
AUTHOR(S): Percin, Gokhan; Khuri-Yakub, Butrus T.
CORPORATE SOURCE: ADEPTIENT, Los Altos, CA, 94024, USA
SOURCE: Abstr. Pap. - Am. Chem. Soc. (2001), 221st, IEC-021
CODEN: ACSRAL; ISSN: 0065-7727
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal; Meeting Abstract
LANGUAGE: English

AB There is a continuing need for alternative deposition and sample prepn. techniques of chem. and biol. fluids and small solid-particles in biomedical and biotechnol. applications, such as drug delivery, drug discovery, high throughput screening, **assaying**, and manufg. of lab-on-**chips**. Aerosol-mediated pulmonary administration of monomeric insulin analog (MIA), e.g. by inhalation, provides rapid, painless treatment of diabetes and hyperglycemia. The ability to control the placement of cells in an organized pattern on a substrate has become increasingly important for the development of cellular biosensor technol. and tissue engineering applications. Lab-on-**chip** systems require reliable and robust methods for dispensing the reagents and biol. agents on the substrates. In this talk, we present a technique for the deposition of biol. and chem. fluids, org. polymers, solid particles, inks, and fuels, using a fluid ejector. The ejector design is based on a flextensional transducer that excites the axisym. resonant modes of a clamped circular plate. It is constructed by depositing a thin piezoelec. annular plate onto a thin, edge clamped, circular plate. Liqs. and solid-particles are placed behind one face of the plate which has a small orifice at its center. By applying an ac signal across the piezoelec. element, continuous or drop-on-demand ejection of fluids and solid-particles has been achieved. The ejected drop size ranges in diam. from 5.mu.m at 3.5 MHz to 150 .mu.m at 7 kHz, the corresponding ejected drop vol. ranges from 65 fl to 1.5 nl, and the corresponding flow rate ranges from 0.2 .mu.l/s to 10 .mu.l/s. The unique features of the device are that the fluid is not pressurized, the fluid container is chem. and biol. compatible with most fluids, it is not thermally actuated, the drops are uniform in size, and the vibrating plate contains the orifice as the ejection source. The device is manufd. by silicon **surface** micromachining and implemented in the form of two-dimensional arrays. Individual elements are made of thin silicon nitride **membranes** covered by a coating of piezoelec. zinc oxide.

=> d ibib abs 5

L93 ANSWER 5 OF 11 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2000:31621 HCAPLUS
DOCUMENT NUMBER: 132:75498
TITLE: Reagentless sensor integrating electrodes, photodetector, and immobilized co-substrate for electrochemiluminescence-based assays
AUTHOR(S): Michel, Philippe E.; Van der Wal, Peter D.; Fiaccabrino, Giovanni C.; De Rooij, Nico F.; Koudelka-Hep, Milena
CORPORATE SOURCE: Institute Microtechnology, SAMLAB, Univ. Neuchatel, Neuchatel, CH-2007, Switz.
SOURCE: Electroanalysis (1999), 11(18), 1361-1367
CODEN: ELANEU; ISSN: 1040-0397
PUBLISHER: Wiley-VCH Verlag GmbH
DOCUMENT TYPE: Journal
LANGUAGE: English
AB A reagentless and regenerable electrochemiluminescence sensor has been developed by immobilizing the Rubpy32+ complex at the **surface** of a miniaturized sensor combining the electrode transducer and the photodetector on the same silicon **chip**. The immobilization was performed following a 2-step procedure. The complex was first incorporated in a sol-gel matrix which was ground to a powder. The microparticles thus obtained were then entrapped in a polyhydroxyethyl methacrylate **membrane**. The sensor was characterized by performing codeine **assays** with std. and pharmaceutical samples. The detection limit for codeine was 20 .mu.M and the sensitivity of the sensor represented 20% of the value obtained when the cosubstrate was supplied in soln. The self-containment working time was detd. to be 7 days of reproducible measurements.
REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d ibib abs 6

L93 ANSWER 6 OF 11 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1999:720569 HCAPLUS
DOCUMENT NUMBER: 132:47182
TITLE: Micropatterned immobilization of a G protein-coupled receptor and direct detection of G protein activation
AUTHOR(S): Bieri, Christoph; Ernst, Oliver P.; Heyse, Stephan; Hofmann, Klaus Peter; Vogel, Horst
CORPORATE SOURCE: Laboratory for Physical Chemistry of Polymers and Membranes, Swiss Federal Institute of Technology, Lausanne, CH-1015, Switz.
SOURCE: Nature Biotechnology (1999), 17(11), 1105-1108
CODEN: NABIF9; ISSN: 1087-0156
PUBLISHER: Nature America
DOCUMENT TYPE: Journal
LANGUAGE: English
AB G protein-coupled receptors (GPCRs) constitute an abundant family of **membrane** receptors of high pharmacol. interest. Cell-based **assays** are the predominant means of assessing GPCR activation, but are limited by their inherent complexity. Functional mol. **assays** that directly and specifically report G protein activation by receptors could offer substantial advantages. We present an approach to immobilize receptors stably and with defined orientation to substrates. By **surface** plasmon resonance (SPR), we were able to follow ligand binding, G protein activation, and receptor deactivation of a representative GPCR, bovine rhodopsin. Microcontact printing was used to produce micrometer-sized patterns with high contrast in receptor activity. These patterns can be used for local referencing to enhance the sensitivity of **chip**-based **assays**. The immobilized receptor was stable both for hours and during several activation cycles. A ligand dose-response curve with the photoactivatable agonist 11-cis-retinal showed a half-maximal signal at 120 nM. Our findings may be useful to develop novel **assay** formats for GPCRs based on receptor immobilization to solid supports, particularly to sensor **surfaces**.
REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d ibib abs 7

L93 ANSWER 7 OF 11 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1999:487472 HCAPLUS
DOCUMENT NUMBER: 131:99524
TITLE: Method for simultaneous identification of proteins and binding partners for targeted diagnosis and drug screening
INVENTOR(S): Ge, Liming; Ilag, Leodevico; Jocelyn, H. Ng
PATENT ASSIGNEE(S): Xerion Pharmaceuticals G.m.b.H., Germany; Jocelyn, H. Ng.
SOURCE: PCT Int. Appl., 34 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9938013	A2	19990729	WO 1999-DE220	19990122
WO 9938013	A3	19991014		
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
DE 19802576	A1	19990909	DE 1998-19802576	19980123
AU 9929199	A1	19990809	AU 1999-29199	19990122

PRIORITY APPLN. INFO.: DE 1998-19802576 19980123
WO 1999-DE220 19990122

AB The invention concerns a method for the identification of a protein via its functionality by simultaneous detn. of the protein and its binding partners, characterized in that (a) proteins or aggregates of proteins from a biol. source are isolated and sepd., (b) the sepd. proteins are immobilized on a **surface**, (c) a combinatorial library is incubated with the immobilized proteins, (d) members of the combinatorial library that bind with the immobilized proteins are sepd. from non-bonded ones, (e) the **surface** bound complexes are isolated, (f) the proteins of the complexes are identified, e.g by mass spectroscopic mapping (g) the binding partners can be amplified by PCR. The invention enables simultaneous identification of proteins with or without prior purifn., and makes it possible to screen a combinatorial library for interaction with the proteins. This allows to identify the functionality of proteins based on their binding specifity. The method can be used for drug screening; for targeted diagnosis of metabolic diseases, e.g. in form of diagnosis **chips**. Thus proteins were isolated from bovine heart mitochondria and blotted onto a PVDF **membrane**. ScFv/Fab phage display libraries were constructed and incubated with the immobilized proteins. The protein-phage complexes were sepd.; they were used directly in ELISA or Western blot. **assays**; or were incubated with PCR buffer and used as PCR matrix with flanking primers. Amplified PCR fragments were cloned and expressed; specificity was detd. by ELISA or Western blot.

=> d ibib abs 8

L93 ANSWER 8 OF 11 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1999:484019 HCAPLUS
DOCUMENT NUMBER: 131:269207
TITLE: Use of surface plasmon resonance for studies of protein-protein and protein-phospholipid membrane interactions. Application to the binding of factor VIII to von Willebrand factor and to phosphatidylserine-containing membranes
AUTHOR(S): Saenko, E.; Sarafanov, A.; Greco, N.; Shima, M.; Loster, K.; Schwinn, H.; Josic, D.
CORPORATE SOURCE: Holland Laboratory, American Red Cross, Rockville, MD, USA
SOURCE: J. Chromatogr., A (1999), 852(1), 59-71
CODEN: JCRAEY; ISSN: 0021-9673
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The **surface** plasmon resonance phenomenon is used for real time measurements of protein-protein and protein-**membrane** interactions. In the present study two **surface** plasmon resonance-based binding **assays** permitting study of the interaction of coagulation factor VIII (fVIII) with von Willebrand factor (vWf) and phospholipid have been developed. These interactions of fVIII are required for maintenance of fVIII concn. in circulation and for the assembly of the functional factor Xase complex, resp. With these binding **assays**, the role of the light chain (LCh) in fVIII binding to vWf and to immobilized phospholipid monolayers and intact vesicles contg. 25% phosphatidylserine (PS) and 4% PS was examd. The finding that Kd of LCh binding to vWf (3.8 nM) is 9.5 times higher than that of fVIII (0.4 nM), indicates that the heavy chain (HCh) is required for the maximal affinity of fVIII for vWf. In contrast, affinities of LCh for 25/75 PS/phosphatidylcholine (PC) monolayers and 4/76/20 PSPC-phosphatidylethanolamine (PE) vesicles are similar to that of fVIII, indicating that LCh is solely responsible for these interactions. It was also examd. how removal of the acidic region affects the binding affinity of the remaining part of LCh for vWf and phospholipid. It was demonstrated that the loss of the LCh acidic region upon thrombin cleavage leads to an 11 and 160-fold increase in the dissocn. rate const. (koff value) and a 165 and 1500-fold increase in the Kd value of the binding of fVIII fragment A3-C1-C2 to vWf compared to that of LCh and fVIII, resp. In contrast, the binding affinity of A3-C1-C2 for PS-contg. **membranes** was 8-11-fold higher than that of LCh. Possible conformational change(s) in C2 domain upon removal of the acidic region were studied using anti-fVIII monoclonal antibody NMC-VIII/5 with an epitope within the C2 domain of LCh as a probe. The detd. lower binding affinity of A3-C1-C2 for NMC-VIII/5 immobilized to a sensor **chip** than that of LCh, indicates that these conformational changes do occur.

REFERENCE COUNT: 52 THERE ARE 52 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d ibib abs 9

L93 ANSWER 9 OF 11 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1999:225053 HCAPLUS
DOCUMENT NUMBER: 131:55918
TITLE: Microstructuring of organic layers for microsystems
AUTHOR(S): Urban, G.
CORPORATE SOURCE: Albert-Ludwigs-University Freiburg, Freiburg, 79085, Germany
SOURCE: Sensors and Actuators, A: Physical (1999), A74(1-3), 219-224
CODEN: SAAPEB; ISSN: 0924-4247
PUBLISHER: Elsevier Science S.A.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Photopatterning of org. photoresist is the std. tool for microstructuring in microelectronics. Therefore it is not surprising that in the field of micro- and nanosystem technol. such a technique is also preferred for mass prodn. The top-down approach for getting microstructures in microsystems comprises UV-, x-ray-, electron-beam and ion-projection lithog. technologies. Problems are the demands for high aspect ratios and depth of focus, which can be solved by new lithog. tools or resists. To get functionalized structured **surfaces** the bottom-up approach for nanosystem technol. also uses photostructuring methods for defined immobilization or deposition of supramol. moieties to create defined **surfaces**. Functionalization of **surfaces** by immobilizing biomols. covalently on reactive **surface** groups or in photostructured **membranes** lead to biosensors for anal. purposes. Miniaturized biosensors comprising the enzyme glucose oxidase are biosensors with the highest importance worldwide. However other techniques as microcontact printing or SPM techniques may be used for deposition and immobilization of org. mols. Using micro- and nanostructure technol. affinity **assays**, cell **assays** and DNA devices on **chip** can be realized for rapid screening purposes in future.

REFERENCE COUNT: 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d ibib abs 10

L93 ANSWER 10 OF 11 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1998:748864 HCAPLUS
DOCUMENT NUMBER: 130:77699
TITLE: Lysosomal degradation on vesicular membrane surfaces; Enhanced glucosylceramide degradation by lysosomal anionic lipids and activators
AUTHOR(S): Wilkening, Gundo; Linke, Thomas; Sandhoff, Konrad
CORPORATE SOURCE: Kekule Institut fur Organische Chemie und Biochemie, Universitat Bonn, Bonn, D-53121, Germany
SOURCE: J. Biol. Chem. (1998), 273(46), 30271-30278
CODEN: JBCHA3; ISSN: 0021-9258
PUBLISHER: American Society for Biochemistry and Molecular Biology
DOCUMENT TYPE: Journal
LANGUAGE: English

AB According to a recent hypothesis (Sandhoff, K., and Kolter, T. (1996) Trends Cell Biol. 6, 98-103), glycolipids, which originate from the plasma **membrane**, are exposed to lysosomal degrdn. on the **surface** of intralysosomal vesicles. Taking the interaction of **membrane** -bound lipid substrates and lysosomal hydrolases as an exptl. model, we studied the degrdn. of glucosylceramides with different acyl chain length by purified glucocerebrosidase in a detergent-free liposomal **assay** system. Our investigation focused on the stimulating effect induced by lysosomal components such as sphingolipid activator protein C (SAP-C or saposin C), anionic lysosomal lipids, bis(monoacylglycero)phosphate, and dolichol phosphate, as well as degrdn. products of lysosomal lipids, e.g. dolichols and free fatty acids. The size of the substrate-contg. liposomal vesicles was varied in the study. Enzymic hydrolysis of glucosylceramide carried by liposomes made of phosphatidylcholine and cholesterol was rather slow and only weakly accelerated by the addn. of SAP-C. However, the incorporation of anionic lipids such as bis(monoacylglycero)phosphate, dolichol phosphate, and phosphatidylinositol into the substrate carrying liposomes stimulated glucosylceramide hydrolysis up to 30-fold. Dolichol was less effective. SAP-C activated glucosylceramide hydrolysis under a variety of exptl. conditions and was esp. effective for the increase of enzyme activity when anionic lipids were inserted into the liposomes. Glucosylceramides with short acyl chains were found to be degraded much faster than the natural substrates. Diln. expts. indicated that the added enzyme mols. assoc. at least partially with the **membranes** and act there.
Surface plasmon resonance expts. demonstrated binding of SAP-C at concns. up to 1 .mu.M to liposomes. At higher concns. (2.5 .mu.M SAP-C), liposomal lipids were released from the liposome coated **chip**. A model for lysosomal glucosylceramide hydrolysis is discussed.

REFERENCE COUNT: 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d ibib abs 11

L93 ANSWER 11 OF 11 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1995:680216 HCAPLUS
DOCUMENT NUMBER: 123:78724
TITLE: Characterization and enzymic application of a redox potential biosensor based on a silicon transducer
AUTHOR(S): Adami, M.; Martini, M.; Piras, L.
CORPORATE SOURCE: Technobiochip, Marciana, 57030, Italy
SOURCE: Biosens. Bioelectron. (1995), 10(6/7), 633-8
CODEN: BBIOE4; ISSN: 0956-5663
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A potentiometric sensor, based on a silicon **chip** and able to detect redox potential changes in soln., is presented and some of its possible applications are investigated. The redox potential of a soln. in contact with the **surface** of a metal layer deposited on the **chip** affects the amplitude of a photocurrent signal generated in the silicon by a modulated light source. The authors investigated the behavior of the structure at different ratios of the redox pair concn. to obtain a calibration curve. The same measurements were performed with different metal layers, of different sizes, to find a configuration suitable for a biosensing purpose. An enzymic application is shown with HRP in soln. and then immobilized on an activated **membrane**. For these studies a micro-vol. reaction chamber was set up, with a microchannel system near the sensitive area. The choice of HRP is linked to the widespread use of this enzyme as label in immunoassays, therefore giving the possibility of using this system as an immunosensor. Other enzymes can be used, and another type of **assay** is proposed using diaphorase together with alc. dehydrogenase.

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=> d que l100
L1            65 SEA FILE=HCAPLUS ABB=ON  PLU=ON  LAHIRI J?/AU
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L3           122 SEA FILE=HCAPLUS ABB=ON  PLU=ON  JONAS S?/AU
L4            19 SEA FILE=HCAPLUS ABB=ON  PLU=ON  KALAL P?/AU
L5         10759 SEA FILE=HCAPLUS ABB=ON  PLU=ON  WANG W?/AU
L6         13029 SEA FILE=HCAPLUS ABB=ON  PLU=ON  (L1 OR L2 OR L3 OR L4 OR L5)
L7           526 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L6 AND ?MEMBRANE?
L8            27 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L7 AND ASSAY?
L9             3 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L8 AND (CHIP OR ?ARRAY? OR
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L10           24 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L8 NOT L9
L11            1 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L10 AND LIGAND(2A)BIND?
L12            4 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L9 OR L11
L16          509 SEA FILE=HCAPLUS ABB=ON  PLU=ON  (?PROTEIN? OR ?PEPTID?)(2A)CHI
                 P
L18        24061 SEA FILE=HCAPLUS ABB=ON  PLU=ON  (?PROTEIN? OR ?PEPTID?)(5A)(?I
                 MMOB? OR ATTACH? OR SPAN? OR FIX OR FIXED OR FIXING)
L23       141484 SEA FILE=REGISTRY ABB=ON  PLU=ON  "SILANE"
L24        25828 SEA FILE=REGISTRY ABB=ON  PLU=ON  "AMINOPROPYL"
L25          569 SEA FILE=REGISTRY ABB=ON  PLU=ON  L23 AND L24
L26          220 SEA FILE=REGISTRY ABB=ON  PLU=ON  L25 AND "GAMMA"
L27           57 SEA FILE=REGISTRY ABB=ON  PLU=ON  L26 AND NC=1 NOT PMS/CI
L28           43 SEA FILE=REGISTRY ABB=ON  PLU=ON  L27 NOT RSD/FA
L29            3 SEA FILE=REGISTRY ABB=ON  PLU=ON  L28 NOT O/ELS
L30            1 SEA FILE=REGISTRY ABB=ON  PLU=ON  L29 AND C3 H11 N SI/MF
L36       156729 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L16 OR L18 OR  (?PROTEIN? OR
                 ?PEPTID?)(5A)(?ASSOCIAT? OR ?COUPL? OR MICROSPOT? OR ?ARRAY?)
L37       668665 SEA FILE=HCAPLUS ABB=ON  PLU=ON  ?MEMBRAN? OR ?BILAYER? OR
                 ?AMPHIPHILIC?(3A)?SURFAC? OR ?PROTEIN?(3A)SPAN?
L38       289077 SEA FILE=HCAPLUS ABB=ON  PLU=ON  ?PRINT? OR QUILL? OR QUILL-PIN
                  OR SPOT? OR MICROSPOT?
L39      1041533 SEA FILE=HCAPLUS ABB=ON  PLU=ON  GLASS OR SILICA OR QUARTZ
L40           73 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L30
L41        43272 SEA FILE=HCAPLUS ABB=ON  PLU=ON  G-PROTEIN
L42          349 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L36 AND L37 AND L38
L43            1 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L42 AND L40
L44            1 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L39 AND L43
L45            1 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L44 AND L41
L46           14 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L42 AND L39
L47            2 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L46 AND L41
L48            1 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L47 NOT (L45 OR L12)
L94           18 SEA FILE=HCAPLUS ABB=ON  PLU=ON  (PROTEIN OR ?PEPTID?)(5A)CHIP(
                 10A)PREPAR?
L96            4 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L94 AND ?MEMBRAN?
L98            1 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L94 AND (?PATTERN? OR ?SPOT?)

L99            4 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L96 OR L98
L100           3 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L99 NOT  (L46 OR L12 OR L48)
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looking for claim 2

=> d ibib abs 1

L100 ANSWER 1 OF 3 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2001:507724 HCAPLUS
DOCUMENT NUMBER: 135:103457
TITLE: Nucleic acids encoding Staphylococcus aureus chemotaxis inhibitory protein
INVENTOR(S): Van Strijp, Johannes Antonius Gerardus; Van Kessel, Cornelis Petrus Maria; Peschel, Andreas Paul
PATENT ASSIGNEE(S): Jari Pharmaceuticals B.V., Neth.
SOURCE: PCT Int. Appl., 68 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001049711	A2	20010712	WO 2001-EP270	20010108
WO 2001049711	A3	20011227		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1118663	A1	20010725	EP 2000-200068	20000107
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				

PRIORITY APPLN. INFO.: EP 2000-200068 A 20000107

AB The invention relates to nucleic acid mols. encoding chemotaxis inhibitory protein from Staphylococcus aureus (CHIPS), which is capable of directly or indirectly blocking different chemokine receptors. The gene chp encoding chemotaxis inhibitory protein was cloned from Staphylococcus aureus Newman and the absence or presence of the gene was tested in various Staphylococcus aureus strains. The invention further relates to methods for **prepg**. recombinant (poly)**peptides** having **CHIPS** activity and to the use of such recombinant (poly)peptides having CHIPS activity for diagnosis, prophylaxis and treatment, such as the treatment of inflammation reactions and HIV.

=> d ibib abs 2

L100 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2001:284901 HCAPLUS
DOCUMENT NUMBER: 134:265126
TITLE: **Protein chip**, its **preparing** process and its application in screening monoclonal antibody
INVENTOR(S): Chen, Gaoming
PATENT ASSIGNEE(S): Chen, Xueyin, Peop. Rep. China
SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 15 pp.
CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1274085	A	20001122	CN 2000-105820	20000413

AB **Protein chip** is **prepd**. by immunizing Balb/C mouse with tissue homogenate, collecting spleen cell of Balb/c mouse, fusing with myeloma cell, sepg. single hybridoma, culturing, **prepg**. **protein chips** on nitrocellulose **membrane**, nylon **membrane**, or glass plate, and constructing hybridoma library. The protein chip may be used for identifying antibody and screening monoclonal antibody. The antibody is identified and screened by culturing protein chip with FITC-labeled rabbit-anti-mouse IgG at 37.degree. for 30-60 min and observing under fluorescence microscope.

=> d ibib abs 3

L100 ANSWER 3 OF 3 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2001:152727 HCAPLUS
DOCUMENT NUMBER: 134:190331
TITLE: Multipurpose diagnostic systems using protein chips
INVENTOR(S): Kim, Sun-young; Yoon, Keejung; Park, Eun-jin
PATENT ASSIGNEE(S): Diachip Limited, S. Korea
SOURCE: PCT Int. Appl., 59 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001014425	A1	20010301	WO 2000-KR928	20000819

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: KR 1999-34427 A 19990819

AB The present invention provides protein chips on which high d. of protein probe arrays are fixed, a method for manufg. the protein chips, atomized diagnostic systems comprising the protein chips and the use thereof. The highly integrated structure of the protein chip makes a biochem. or an immunol. assay faster, suitable for automation, precise and easy to handle. The usage of the protein chip encompasses clin. diagnosis, researches for the kinetics of enzymic reactions and screening antagonists or ligands which bind to the interested receptors. In particular, the protein chip enables multipurpose diagnosis of various diseases for a no. of patients even by a test. Recombinant antigens from hepatitis C virus or from HIV-1 were immobilized on glass slides coated with aminoalkylsilane to make protein chips which were used to detect antibodies in blood serum samples. FITC-conjugated anti-human IgG and high-speed fluorescence scanning were used in the detection.

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT